

REPRESENTATIVE DOCUMENTS

OSS Contributor Agreements

Guidelines for Contributing to Open/Community Source Software http://uctas.ucop.edu/documents/uc-guidelines-contributing-oss-communities.pdf

UNIVERSITY OF CALIFORNIA GUIDELINES FOR CONTRIBUTING TO OPEN/COMMUNITY SOURCE SOFTWARE

I. PURPOSE

The University of California not only uses Open Source Software and Community Source Software (O/CSS) in furtherance of its mission, in a growing number of cases the University also contributes code back to those O/CSS communities. Benefits accrue to the University as a result of making such contributions, but in doing so the University takes on certain associated responsibilities.

The purpose of this document is to:

- Summarize the rights and responsibilities associated with O/CSS contributions made on behalf of the University;
- Provide guidelines by which the University can most effectively and appropriately evaluate and manage
 making such contributions, taking into account pertinent licensing, technical, intellectual property, legal,
 policy and cost/benefit issues; and
- Identify organizations, roles and responsibilities pertinent to the implementation and management of the guidelines outlined herein.

II. APPLICABILITY

These Guidelines apply to:

- All Open Source Software and Community Source Software (as defined in Section III below) used by the University of California;
- All software code that has been created by, or on behalf of, the University of California, that is based
 upon and intended to correct, modify or enhance existing O/CSS software code, and which the
 University of California determines is in its best interest to contribute to that O/CSS community;
- All employees, including student, part-time and temporary employees;
- All departments and organizations of the University of California; and
- All third parties whose conduct, in the performance of their work for the University of California, is under the control of the Regents of the University of California.

III. DEFINITIONS

<u>Community Source Software (CSS)</u>, as used in these Guidelines, means a software model that blends elements of directed development, in the classic sense of an organization employing staff and resources to work on a project, and the openness of traditional Open Source Software projects.

<u>License</u>, as used in these Guidelines, means a contract in which a copyright owner grants to another permission to exercise one or more of their rights under copyright.

8/26/2012 Page 1 of 4

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<u>Open Source Software (OSS)</u>, as used in these Guidelines, means computer software that is available in source code form for which the source code and certain other rights normally reserved for copyright holders are provided under a software license that permits users to use, study, change, and improve the software.

<u>Source Code</u>, as used in these Guidelines, means a collection of human-readable text and/or programming commands needed to specify the actions to be performed by a computer or computing device.

IV. STATEMENT

The University of California not only uses O/CSS in furtherance of its mission, in a growing number of cases the University also contributes code back to those O/CSS communities. Benefits accrue to the University as a result of making such contributions, but in so doing the University takes on certain associated responsibilities.

Benefits that accrue to the University as a result of contributing code to communities supporting the O/CSS solutions it uses include:

- Adoption of an O/CSS solution can be an important long term investment. Every effort that the
 University makes to contribute to that O/CSS solution helps to ensure its ongoing success which in term
 protects the University's investment in that solution.
- Contributing code can enable the University to influence the direction of an O/CSS solution to ensure that it continues to align with the University's needs.
- Code developed by the University for an O/CSS solution is likely done to customize the O/CSS to meet
 the University's specific needs. Each time the University upgrades to a new version of that O/CSS,
 it may have to expend additional resources to develop the same code customization to apply to the new
 version. If the code that the University contributions back to the O/CSS community is incorporated into
 the core code for all subsequent versions, then the University will save resources by not having to
 develop the same customized code for each new version.
- It is easier to ask for and receive support from an O/CSS community when one also gives back to that community. By helping others, we help ourselves.

Responsibilities that the University takes on as a result of contributing code to communities supporting the O/CSS solutions it uses include:

- The University's contribution of code does not guarantee that it will be approved for incorporation into
 the core code. For this reason it is important that the University ensure that any code it may contribute
 meets a sufficient level of technical quality and usefulness.
- The University must take appropriate steps to confirm that the code to be contributed was fully created by the University and/or its representatives, and does not contain the intellectual property of others.
- The University must take appropriate steps to ensure that the code to be contributed does not
 have prior conflicting intellectual property rights obligations or restrictions. Code developed under some
 form of externally sponsored research should be closely reviewed for this.
- The University must take appropriate steps to determine that the contribution of the code is in the University's best interest.

The use of each individual O/CSS solution is governed by the terms and conditions under which it is licensed, and is protected under United States Copyright law. Furthermore, the University has various internal policies related to Intellectual Property (IP) that may be pertinent to the contribution of code to O/CSS communities. The University is obligated by policy and law to ensure that any code contributions to an O/CSS community are in compliance with the terms and conditions of the pertinent license, laws and internal policies.

8/26/2012 Page 2 of 4

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V. GUIDELINES

Under the executive sponsorship of the UC Information Technology Leadership Council (ITLC), the UC Technical Acquisition Support (TAS) group researched State and Federal law, and existing University policies pertinent to making contributions to O/CSS. As a result of that research, TAS developed the following guidelines, and proposes that they be implemented as an effective mechanism by which the University can ensure that any code contributions it may make to an O/CSS community are in compliance with the terms and conditions of the pertinent license, laws and internal policies.

- Each campus should establish a process by which to ensure that any contribution of University developed code to an O/CSS community is in the best interest of the University and is in compliance with the pertinent licenses. laws and policies.
- 2. The process noted above should include a mechanism by which to effectively confirm that the code to be contributed was fully created by the University and/or its representatives, and does not contain the intellectual property of others. This mechanism should include identification of who specifically authored the code to be contributed, and a review of the laws and/or policies pertinent to that individual's relationship to the University (staff, faculty, contractor/consultant, etc.).
- 3. The process noted above should include a mechanism by which to effectively confirm that the code to be contributed does not have prior conflicting intellectual property rights obligations or restrictions.
- 4. The process noted above should include a mechanism by which to effectively confirm that any code to be contributed meets a sufficient level of technical quality and usefulness.
- 5. The process noted above should include a mechanism by which to effectively confirm whether or not the benefits derived by contributing the code exceed the benefits that could be derived by the University retaining exclusive intellectual property rights to the code. In cases where an O/CSS solution has already been vetted through the appropriate internal governance process and identified as a campuswide solution, then it may be prudent to establish that the contribution of University developed code to that O/CSS project is understood to be in the best interest of the University. NOTE: If the code to be contributed is for an O/CSS solution licensed under the GPL or other "Reciprocal" license, then the University could choose to use the code solely for internal purposes, but would not have the right to externally distribute for a profit.
- The process noted above should include identification of the positions and offices responsible for each element of the process.
 - a) At most UC campuses, the office responsible for technology transfer and/or intellectual property rights is the primary authority in this area and is likely to be the primary office responsible for managing this process. See the the list of UC Copyright Contacts (http://www.ucop.edu/ott/faculty/crcontac.html) for the contact information for this office at each campus.
 - b) Project leads, supervisors, managers, department heads, directors and senior management are responsible for identifying projects in their units to which these guidelines apply, and ensuring that any code contributions are compliance with the established process.
- 7. It is recommended that this process be clearly defined and documented in a contribution agreement (CA) that can be completed by each individual developer/contributor, and reviewed by the responsible individuals and/or offices prior to the contribution being made. The CA should include the following;
 - a) Identification of the code to be contributed;
 - b) Identification of the individuals who contributed to the development of the code;
 - Identification of the approved campus-wide information technology project with which the contribution is associated, if any;
 - d) Identification of the benefits that would accrue to the University as a result of the contribution;
 - e) Identification of any code authored by others that may be included in the code to be contributed;

8/26/2012 Page 3 of 4

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- f) Identification of the nature of the code to be contributed (patch, enhancement, new functionality, etc.);
- g) Identification of the source and date of the internal technical review; and
- h) An acknowledgment of understanding of the terms under which the code is being contributed.

A sample CA document is attached and may be customized to reflect the pertinent unique information for each UC campus.

VI. REFERENCES

- University of California Policy on Copyright Ownership University of California, Office of the President, August 19, 1992 - (http://www.ucop.edu/ucophome/coordrev/policy/8-19-92att.html)
- University of California Software On-Line Permission Statement -(http://www.ucop.edu/ott/permissn.html)
- University of California Contracts and Grants Manual Chapter 11 Intellectual Property -(http://www.ucop.edu/raohome/cgmanual/chap11.html)
- UC Guidelines on University-Industry Relations -(http://www.ucop.edu/ott/genresources/policy_pdf/IndRelGuidelines.PDF)
- 5. UC Memorandum: Guidance for Faculty and Other Academic Employees on Issues Related to Intellectual Property and Consulting (http://www.ucop.edu/ott/documents/consult.pdf)
- 6. UC Guidelines on Intellectual Property Issues (http://ucop.edu/research/policies/ip.html)
- 7. UC Copyright Contacts- (http://www.ucop.edu/ott/faculty/crcontac.html) and (http://www.ucop.edu/ott/faculty/crcontac.html)
- 8. Copyright Law of the United States of America and Related Laws Contained in Title 17 of the United States Code (http://www.copyright.gov/title17/)
- 9. Producing Open Source Software by Karl Fogel Chapter 9 (http://producingoss.com/en/legal.html)
- 10. Open Source Definition Open Source Initiative (http://www.opensource.org/docs/osd)
- 11. Open Source License Types Open Source Initiative (http://www.opensource.org/licenses/alphabetical)

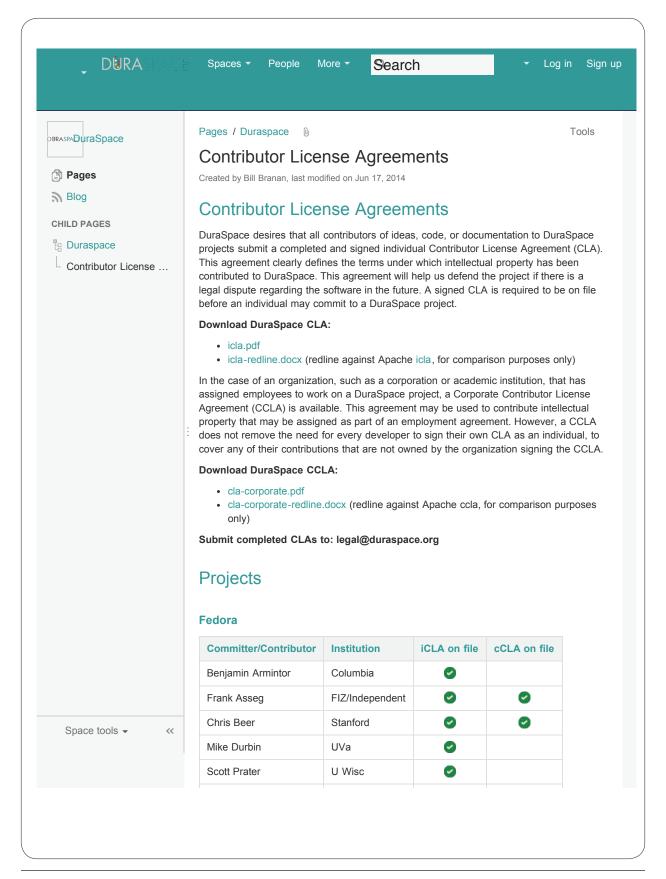
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1. Sample CA form

8/26/2012 Page 4 of 4

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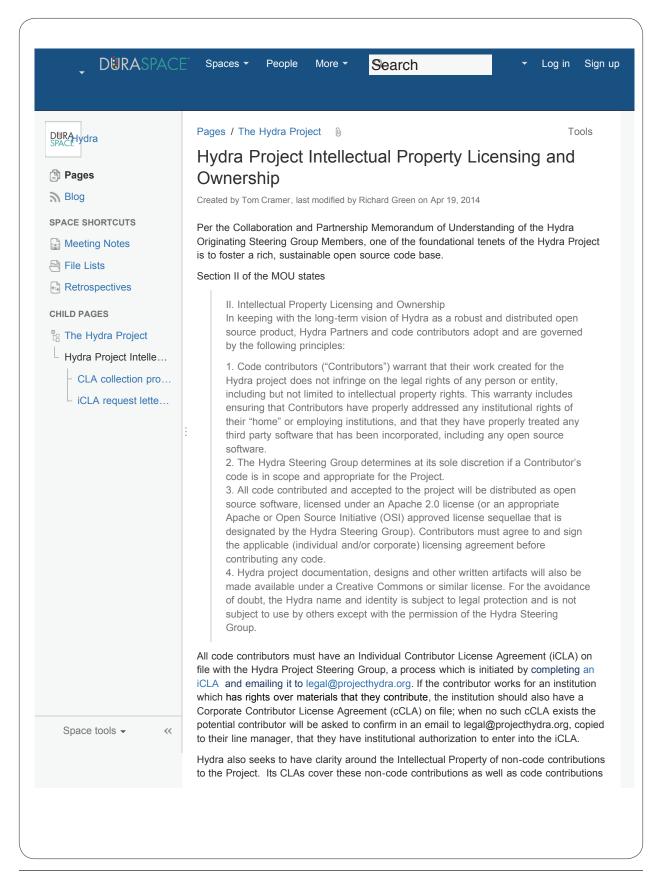
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and CLAs will be required from individuals and institutions offering non-code materials. At the present time the Hydra Steering Group have determined that such materials should be sub-licensed using a Creative Commons Attribution-Share Alike 3.0 Unported License as permitted under paragraph 2 of the CLA.

- · Hydra Project cCLA
- · Hydra Project iCLA

The Hydra Project Contributor License Agreements are based on the Apache Foundation CLA's. Redlined versions of both CLA's show the differences between the stock Apache agreement and the Hydra Project agreement.

- · Hydra Project Redlined cCLA
- Hydra Project Redlined iCLA

CLA status page

- iCLA request letter (code contributions)
- cCLA request letter (code contributions)
- iCLA request letter (non-code contributions)
- · CLA collection process

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· Licensed software acceptance procedure

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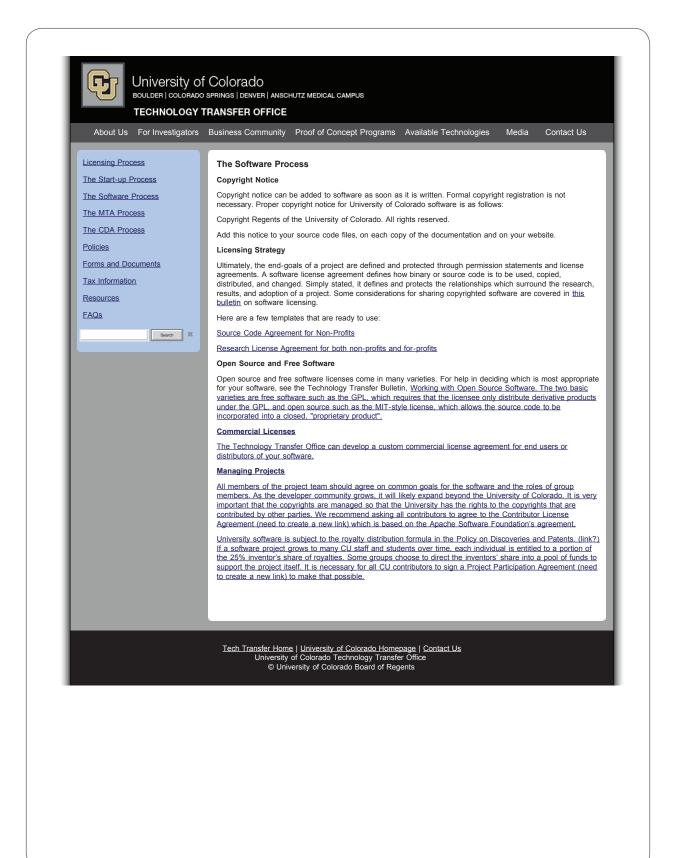
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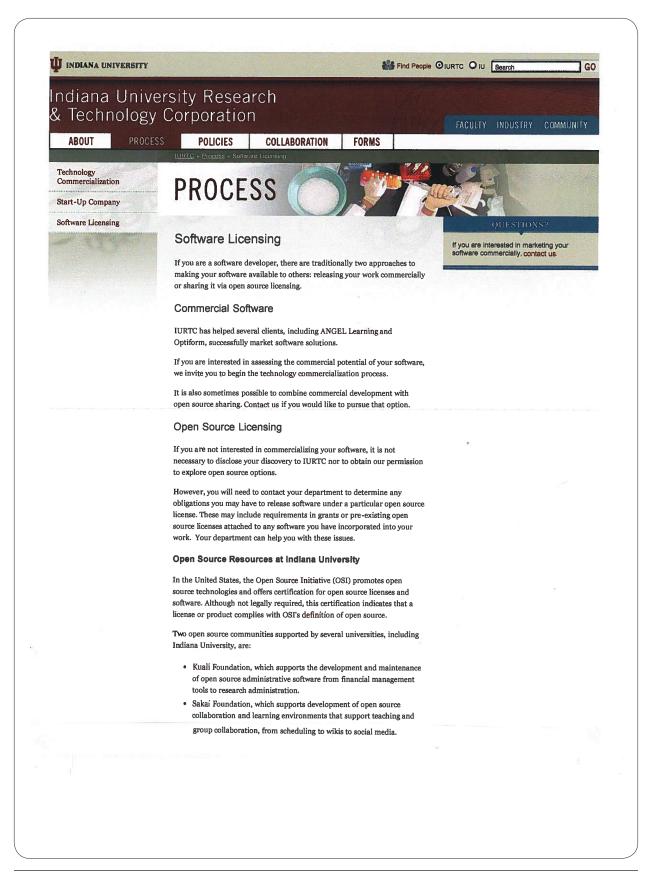
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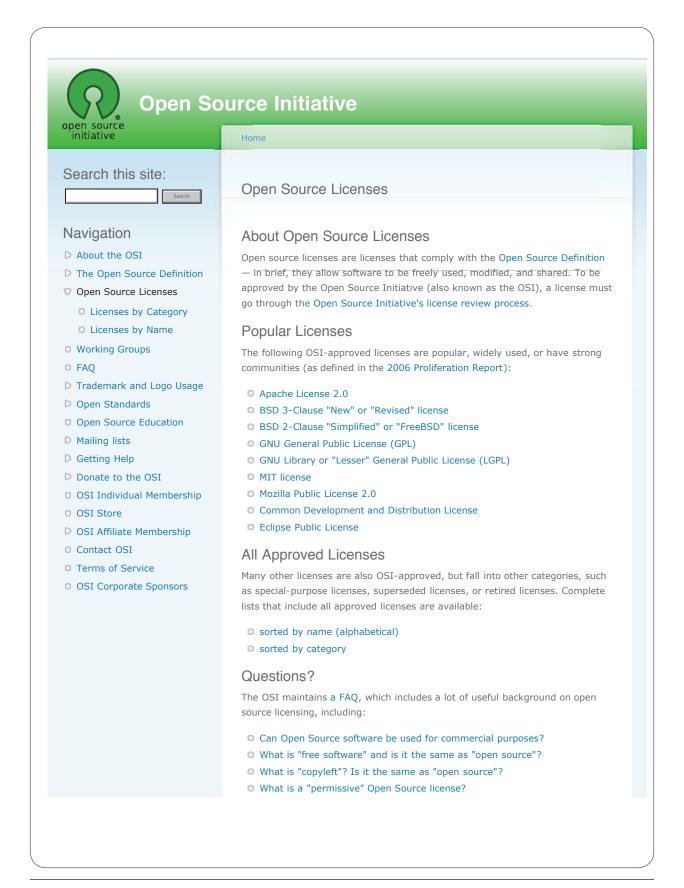
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- The Open Source Definition (annotated version)
- The OSI License Review Process
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The <u>Free Software Foundation</u> is the principal organizational sponsor of the GNU Operating System. **Support GNU and the FSF** by <u>buying manuals and gear</u>, <u>joining the FSF</u> as an associate member, or making a **donation**, either <u>directly to the FSF</u> or <u>via Flattr</u>.

back to top

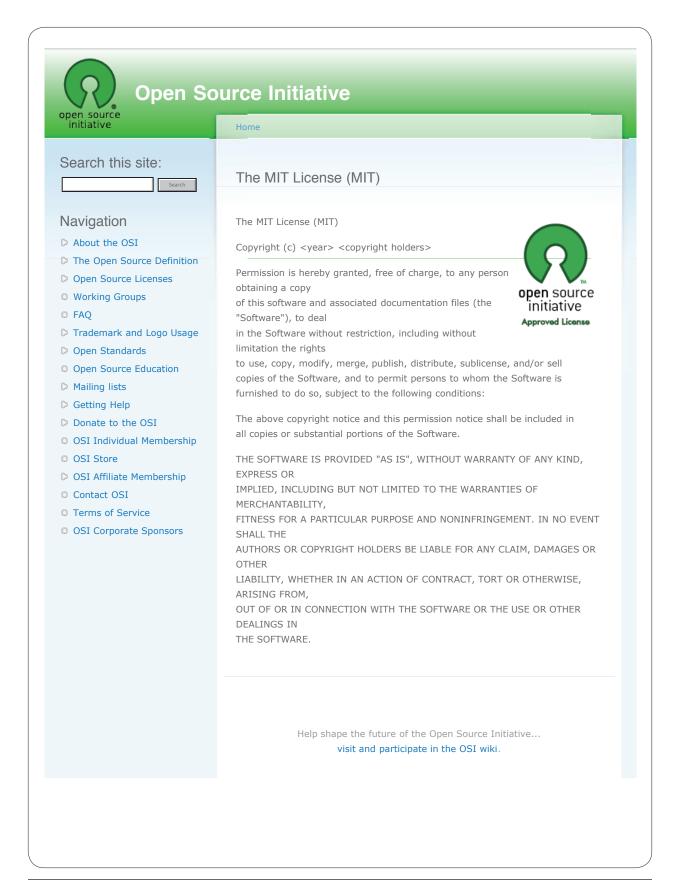
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Please send general FSF & GNU inquiries to <u>sqnu@gnu.org</u>. There are also <u>other ways to contact</u> the FSF. Broken links and other corrections or suggestions can be sent to <u>swebmasters@gnu.org</u>. Please see the <u>Translations README</u> for information on coordinating and submitting translations of this article.

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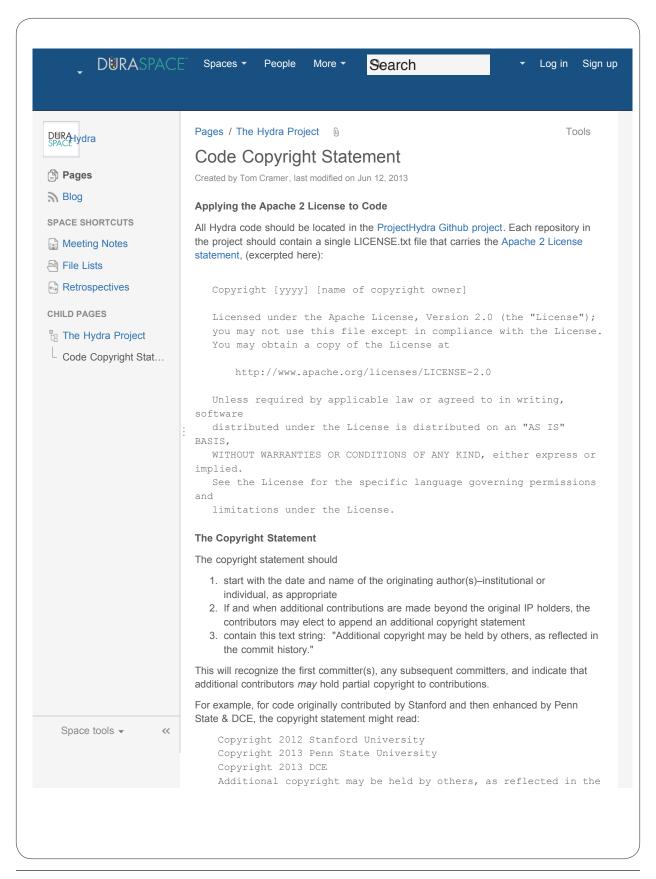
Updated: \$Date: 2014/04/12 12:39:51 \$



102 · Representative Documents: OSS Licenses

	OSS Copyright	Notices

https://wiki.duraspace.org/display/hydra/Code+Copyright+Statement



DURASPACE

The Hydra Project Code Copyright Statement https://wiki.duraspace.org/display/hydra/Code+Copyright+Statement

commit history.

Read Me

In addition to the LICENSE.txt file, all ProjectHydra code should contain a README.md file, at the bottom of which is an Acknowledgements section. In this section, please add the following text (in addition to any other repository-specific acknowledgements):

This software has been developed by and is brought to you by the Hydra community. Learn more at the Project Hydra website



Examples

See exemplars of these at

LICENSE.TXT: https://github.com/projecthydra/hydra/blob/master/LICENSE.txt README.md: https://github.com/projecthydra/hydra/blob/master/README.md gist of footer markdown only: https://gist.github.com/mark-dce/5763268

No labels

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This Confluence installation runs a Free Gliffy License - Evaluate the Gliffy Confluence Plugin for your Wiki!

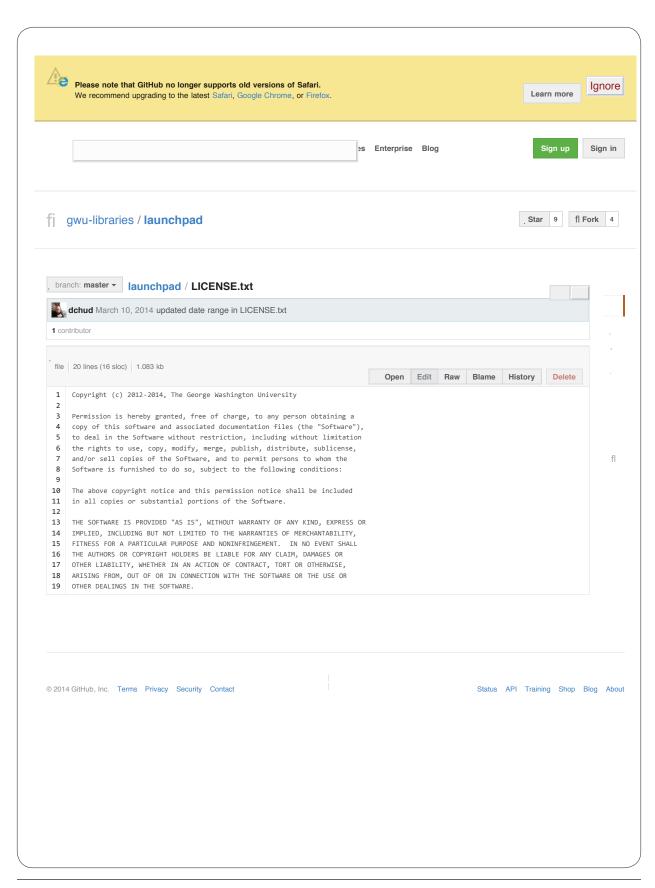
Powered by Atlassian Confluence 5.5.2, Team Collaboration Software $\,\cdot\,\,$ Report a bug $\,\cdot\,\,$ Atlassian News $\,\cdot\,\,$



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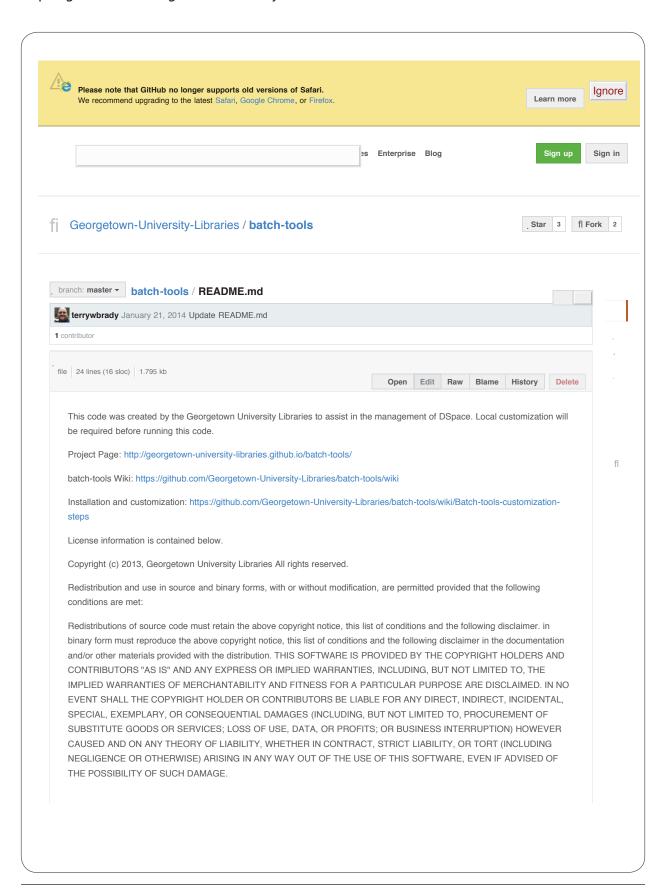
https://github.com/gwu-libraries/launchpad/blob/master/LICENSE.txt



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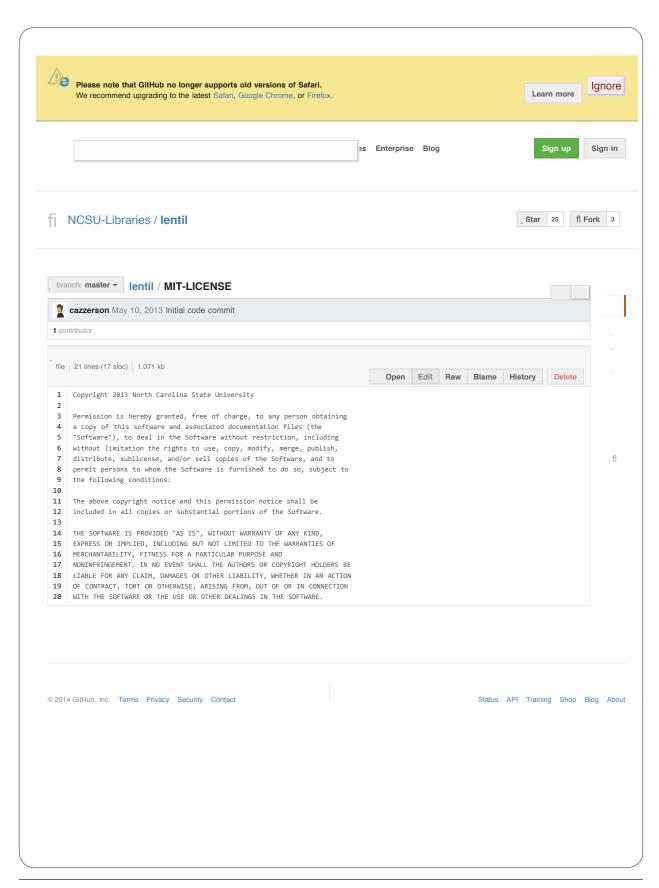
https://github.com/Georgetown-University-Libraries/batch-tools/blob/master/README.md



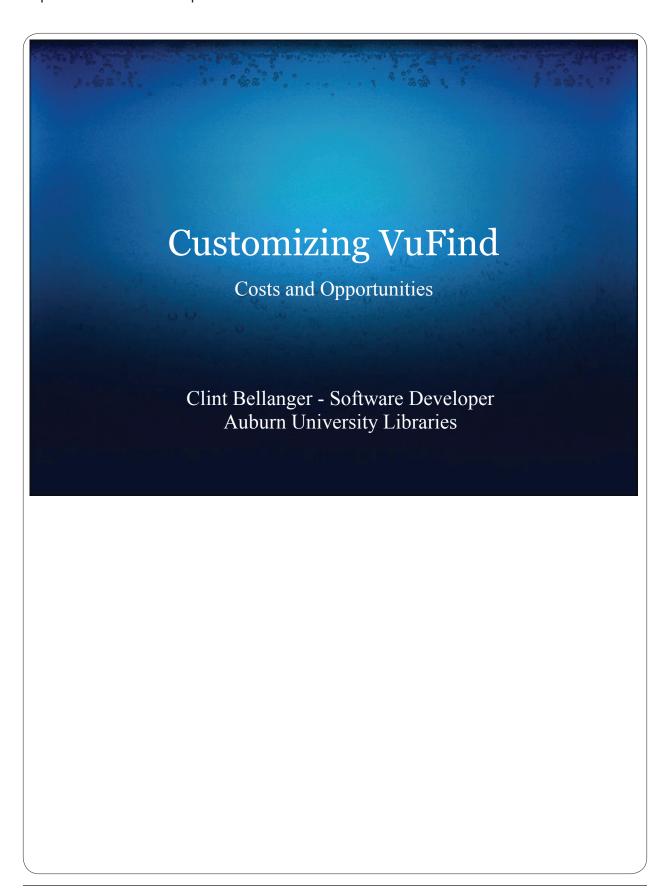
NORTH CAROLINA STATE UNIVERSITY

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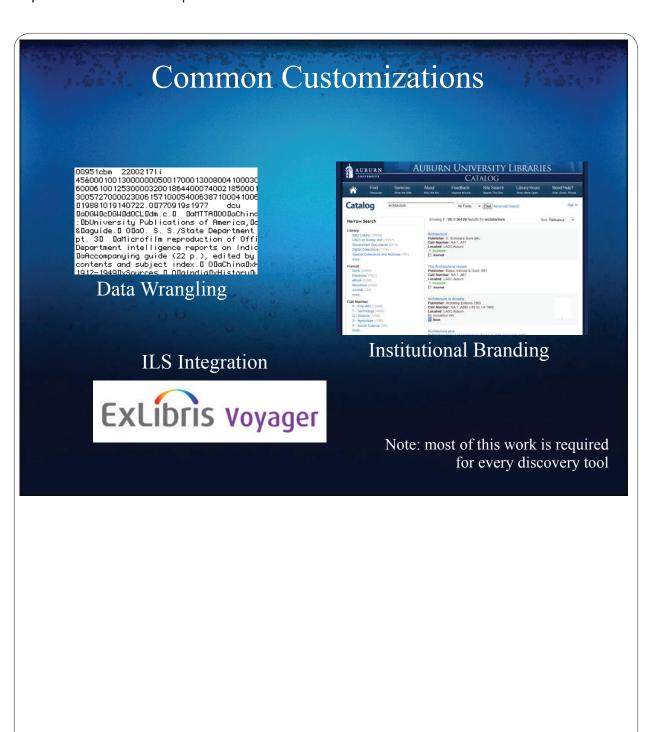
https://github.com/NCSU-Libraries/lentil/blob/master/MIT-LICENSE

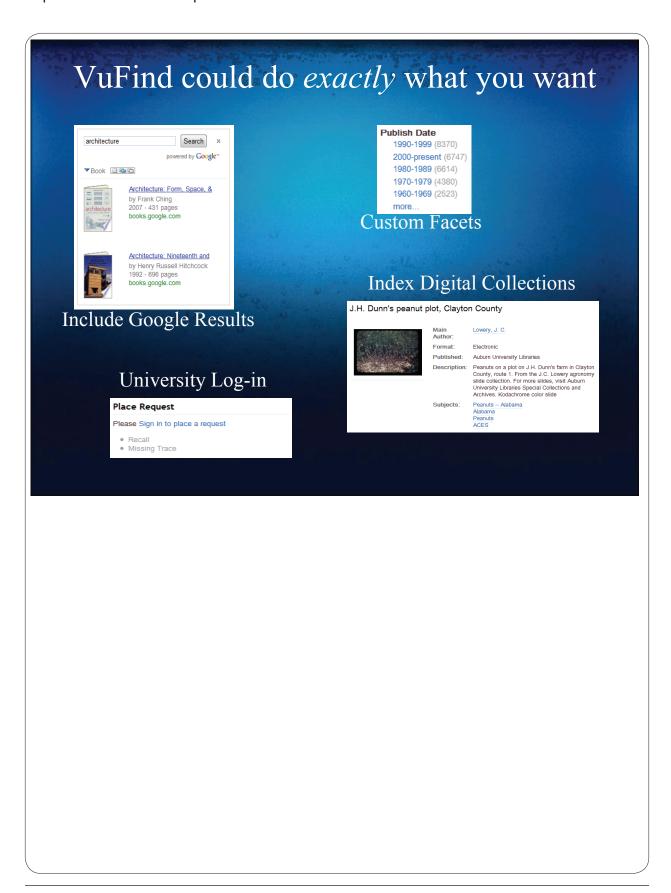


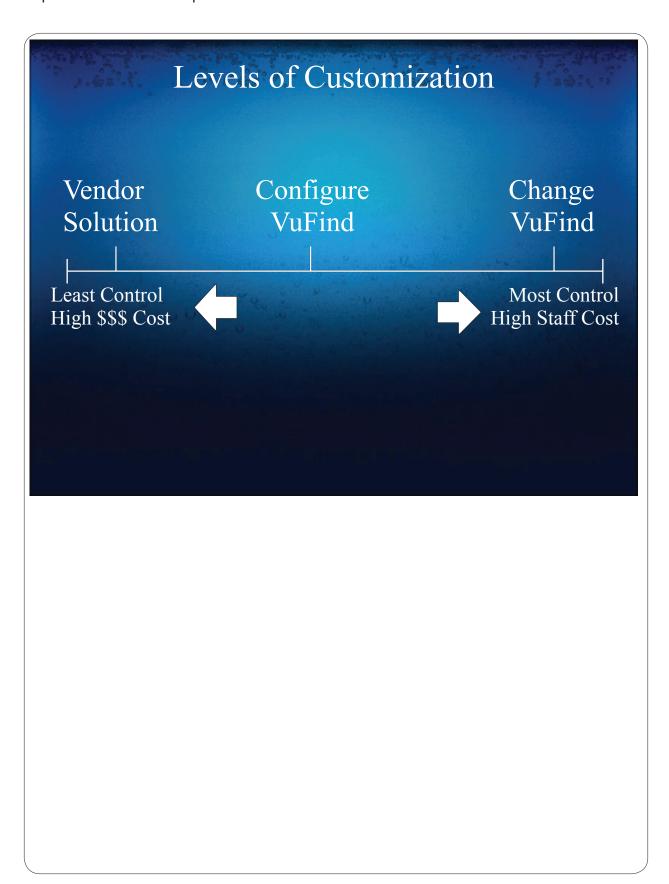
	OSS Adoption Decision



Costs? VuFind is free* software! * Zero licensing costs * Free as in Freedoms and Rights * Elbow grease not included

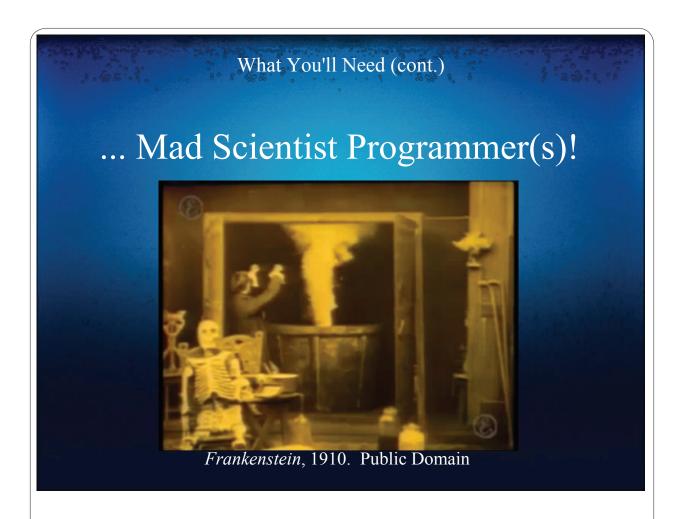








What You'll Need Supportive and critical Research Librarians Patron feedback More meetings and time than you expect But most of all ...



Case Study: Auburn University Catalog

- 18 months from experimentation to Beta to default*
- 1 project leader spending 50% time
- 2 software developers each spending 50% time
- 1 server admin spending 5% time
- 1 graphic designer spending 5% time
- 5-8 departmental representatives in weekly/biweekly meetings
- Server costs

*Development continues. Meetings are smaller and monthly.

Risks

- Software project failure rate is notoriously high
- Considerable staff costs
- Customize too much and upgrading is painful
- Google Scholar gains sentience; then what?

Rewards

Less patron frustration, especially among undergrads Increase in patron service usage Campus-wide interest in indexing local data Leads to publishing, seminars, and grants! Share improvements with libraries around the world http://aurora.auburn.edu/repo/handle/11200/44104



Job Descriptions of OSS Contributors

AUBURN UNIVERSITY

Information Technology Specialist IV/V

Information Technology Specialist IV/V
(Software Developer/System Administrator)

The Auburn University Libraries (AUL) is accepting applications for a Software Developer/System Administrator. This position is part of the Information Technology (IT) suite. It is based in the AUL Systems Department and reports to the Senior Software Developer in that department.

DUTIES: Develops library-oriented software applications as needed, a duty that may include modifying and adapting open-source software applications or utilities; writes custom scripts for routine library functions; works with Auburn University Libraries faculty and staff on digital library projects requiring in-house coding; works with faculty and IT staff from other university departments on related projects, including an institutional repository (IR) and undergraduate research journal; serves as a backup System Administrator. In this capacity, helps Systems staff manage the Library's Linux and Windows servers, including software upgrades and patches, security, and backup. Installs, configures, maintains, and (if necessary) extends third-party software applications (e.g. Integrated Library Systems, digital content-management software, document-delivery software); helps maintain an in-house Wiki on various aspects of library IT; shares a rotating weekly schedule of evening and weekend on-call duty; serves on university committees as needed and represents the Auburn University Libraries at the state, regional, and national levels.

REQUIRED QUALIFICATIONS: Thorough knowledge of at least one high-level programming or scripting language (e.g. Java, C#, C, C++, PHP, Perl, Python, Ruby) and experience developing custom applications using at least one of these languages. Experience with modern version-control software (e.g. Subversion, Git, Mercurial). Experience administering Linux servers, including shell scripting; or the ability to learn how to administer servers with these operating systems. Ability to clearly document all software development projects and programs. Effective written and interpersonal communication skills and the ability to interact professionally with a diverse group of users and support staff. Proven ability to successfully initiate, track, and manage multiple detail-oriented projects simultaneously. High school diploma or equivalent plus at least 6 years relevant experience as a software developer, database designer or administrator, and/or System Administrator. Employer will consider advanced degrees in lieu of experience.

DESIRED QUALIFICATIONS: Experience developing custom applications in a wide variety of programming languages. Experience planning, implementing, and/or maintaining an institutional repository (IR) using DSpace or another IR package (e.g. Fedora). Experience working with open-source software for next-generation library catalogs and discovery tools (e.g. VuFind, Blacklight, Koha, Evergreen). Experience in database administration (e.g. Postgres, MySQL, Oracle, Solr). Experience in structured software testing and quality assurance. Experience working in an academic library environment, especially experience with digital library projects. Preferred educational level: Four-year college degree in computer science, MIS, or a related field.

NORTH CAROLINA STATE UNIVERSITY LIBRARIES

Digital Technologies Development Librarian

North Carolina State University is a landgrant university and a constituent institution of The University of North Carolina NCSU Libraries Campus Box 7111 Raleigh, NC 27695-7111

NC STATE UNIVERSITY

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Personnel Services 919-515-3522 (phone) 919-513-2972 (fax)

NORTH CAROLINA STATE UNIVERSITY LIBRAR (15.5) 13-2972 (fax) DIGITAL TECHNOLOGIES DEVELOPMENT LIBRARIAN VACANCY ANNOUNCEMENT

The NCSU Libraries has a well-earned reputation for creating adventurous library spaces and innovative services that delight today's students and researchers. The D. H. Hill Library combines the best of tradition and innovation, housing special collections and a beautiful gallery alongside vibrant, experiential spaces such as the Learning Commons and Technology Sandbox. Soon we will open a magnificent new library that promises to be nothing less than the best learning and collaborative space in the country. Located on NC State's Centennial Campus, the James B. Hunt Jr. Library will be an iconic space, a place where people gather to explore new ways to research, learn, experiment, collaborate, and affect the world. Designed as a working incubator for educational technology, the Hunt Library will serve as a second "main library," complementing the D. H. Hill Library, with services focused on the Centennial Campus community. If you are a person who would like to provide a new generation of library users with everything they can imagine and more, consider applying for the following position.

The NCSU Libraries invites applications and nominations for the position of **Digital Technologies Development Librarian** in the Digital Library Initiatives department. Digital Library Initiatives develops and delivers an information environment that significantly advances end-user resource discovery and use of library services. As a member of the Digital Services Development group, the Digital Technologies Development Librarian works as an active member of a team that advances digital library services through applied research and application development, and manages the entire life cycle of projects, from requirements gathering to deployment.

Responsibilities

The Digital Technologies Development Librarian provides technical leadership and hands-on programming expertise for a portfolio of digital library projects. In close collaboration with technical and non-technical partners across the Libraries, she or he identifies emerging technologies that have potential for new and improved library services. Working both independently and in team settings, the incumbent develops functional prototypes of new digital library services through an iterative, data-informed, and test-driven process that emphasizes performance, sustainability, and usability. The Digital Technologies Development Librarian maintains and provides enhancements to existing digital library applications and collaborates closely with Information Technology staff to develop and maintain supporting infrastructure. The incumbent participates in library planning and serves on library-wide committees, task forces, and teams. NCSU librarians are expected to be active professionally and to contribute to developments in the field. Reports to the Lead, Digital Services Development

Required qualifications:

- ALA-accredited MLS or equivalent advanced degree
- Server-side application development experience with one or more open source programming languages such as PHP, Python, or Ruby; as well as SQL
- Database development skills
- Evidence of ability for ongoing professional development and contribution

Preferred qualifications:

- Knowledge of user-centered design processes, including user studies and usage data analysis
- Experience using client-side web technologies including JavaScript and CSS, HTML5, and related technologies.
- Experience in mobile application development and knowledge of mobile design principles
- Familiarity with version control systems such as Git or Subversion
- Experience working on or contributing to open-source software projects
- Experience working in an academic library

Sr. Software Engineer

The Sr. Software Engineer plays a central role in the ability of the library to cater technical solutions to the needs of the university in its mission to advance scholarship, learning and research. This position proactively architects reliable back end data services and infrastructure which anticipates the evolving information needs of students and faculty members. Responsibilities include the design and implementation of scalable applications and software components, engagement with library constituents in negotiating the diverse research and learning needs of the university, as well as communicate with and educate library staff, faculty and administrators regarding emerging trends in technology in order to meet goals and strategic initiatives. Incumbents also have the responsibility to research as well as implement current trends and innovations in both library technology and technical industry best practices and standards. The position also requires a high degree of accountability, and thus requires that individuals working in this position manage project time lines, deliverables, and resources to ensure that planned objectives are met.

The Sr Software Engineer:

- Designs, implements, tests, deploys and supports a wide range of software applications in support of core library objectives
- Architects and implements robust and dependable infrastructure components, data services, and software integration services
- Engages with library faculty and staff, university teaching and research faculty, as well as students at all levels in order to ensure that library software and web related services are meeting the needs of the library and the university
- Plans and manages project tasks, updates documentation, works with quality assurance and usability professionals.

Requires a Bachelor's degree in computer science, or combination of Bachelor's degree and relevant experience.

Requires knowledge of programming in Ruby and Ruby on Rails; High degree of experience with web technologies and standards such as HTML, CSS and Javascript; Database schema design; SQL; Strong knowledge of object oriented design and implementation; basic linux systems administrative skills; experience with web based APIs; systems integration skills; use of version control system such as git; some experience with test driven development; strong verbal and written skills requires. Knowledge of programming in the areas of PHP, Perl, Java, advanced knowledge of software testing; shell scripting; XML/XSLT; JSON; Coffeescript; SASS; ¡Query.

UI Software Engineer

With a focus on user interface design, we are seeking a web and mobile application developer for digital collections, research data, and library digital services. This position will leverage both programming and graphic design skills to design and develop digital exhibits, research data visualizations, and digital media portals for the web and mobile devices. The incumbent will work closely with other applications developers to integrate these elements into web sites using Ruby on Rails, CSS, JavaScript, HTML5, and other emerging web technologies. Mobile application development will focus on responsive web design, but may include native iOS and android application development as well. Mobile applications are increasingly important to collect, organize, and share data while conducting research and learning.

This position will participate in cross departmental and organizational groups with partners from the Center for Research Computing (CRC), Academic Technologies, OIT, University Archives, researchers, and Hesburgh Libraries to support research and collection management throughout campus. A major focus of this position will be on improving library services through user interface software engineering. The incumbant will help to support key library discovery applications and related electronic resources.

In collaboration with universities such as Stanford, Virginia, and Northerwestern, the incumbent will also contribute to an open source project called Hydra (http://hydraproject.org) that was formed to pool our resources to create groundbreaking digital library tools for ourselves and for the wider community. Faculty, researchers, students, and staff utilize these Hydra solutions for preserving data, managing descriptive information, and sharing of research information mandated by grant funding agencies such as NSF.

The UI Software Engineer:

- Designs and develops user focused parts of ruby on rails applications including graphical
 elements, user interfaces, and other application elements for digital exhibits, digital library
 services, and discovery applications. Integrates responsive web design into web sites to support
 mobile devices; creates mobile targeted websites; creates native iOS and Android applications.
- Works with other applications and digital library infrastructure developers, designs front end solutions and orchestrates interactions with services including metadata management, digitization workflows, image transformation, etc.
- · Develops digital infrastructure services
- Participates in conferences, committee meetings, and planning meetings with partners on community projects.

Required Qualifications:

- 1+ years experience with a modern web framework e.g. Ruby on Rails, Django, Play, or Symphony
- Intimate knowledge of JavaScript, HTML, and CSS
- 1+ years experience developing with relational databases such as MySQL, PostgreSQL, or Oracle

UNIVERSITY OF NOTRE DAME

UI Software Engineer

Preferred:

- Understanding of the elements of art and the principles of design
- Knowledge of HTML5 and CSS3
- Ability to design and implement responsive web pages and applications interfaces
- Experience with JavaScript visualization tools like D3, Raphaël, TimelineJS, etc.
- Experience with JavaScript mapping tools like Leaflet, OpenLayers, or the Google Maps API
- iOS or Android application development experience
- Experience designing HTTP interactions that employ the correct verbs and status codes
- Experience working on a team that employs the agile development process
- Strong analytical, reasoning and problem resolution skills and demonstrated success in applying technology to meet user needs
- Ability to handle interpersonal communications tactfully and accurately with a diverse community of users and vendors
- Ability to work independently and in close conjunction with others in a team-oriented setting
- · Ability to learn and master new skills and technologies quickly
- Experience with Fedora Commons Repository, iRODS, LOCKSS, or other preservation system
- Experience utilizing Apache Solr or Lucene indexes

Requires Bachelor's Degree in Informatics, Information Science, or equivalent experience in end user applications design.

In addition to strong application development skills, we are also looking for someone with strong design instincts to create polished user interfaces for interacting with our unique resources within our digital repository.

Systems Developer/Engineer

2 openings

Systems Developer / Engineer Non-SAP Working Title: Applications Developer

Job Code: 8189

Classification: A&P (non-SAP)

Position #: TBD

Hours/Shift: 8 a.m. - 5 p.m.

Position Organization: 32015 Information Technology

Work Location: 18th Ave Library

Reports to Position #: 00061038, Head, Applications Dev/Support

Summary of Duties:

University Libraries are seeking an Applications Developer for the Applications Development & Support (AD&S) department in the Information Technology Division of the University Libraries. As a member of the AD&S team, the successful candidate will be responsible for designing, developing and managing innovative web-based applications that support, enhance, and extend the mission of The Ohio State University Libraries. With this goal in mind, the candidate will design, develop, implement, and test web applications, as a suite of products and services, for delivery via OSU Libraries public and private web sites, library catalog, and/or other web related systems that are in accord with industry best practices, the Libraries' and Ohio State's branding standards, and web accessibility guidelines. This position provides a great opportunity to design creative and usable solutions, making a significant impact on how patrons, faculty and staff experience services at the University Libraries.

Additional Information for Applicants: (Please submit this section to OHR and request this information be added to the Additional Information section provided on the jobs board)

Services We Provide

AD&S provides four service offerings to the Libraries: collaboration and communication platforms which include the Libraries' content management system, blogs and Intranet; custom application development; Integrated Library Systems support (i.e. catalog services); and IT project management.

The Team

The AD&S team currently includes two developers, one project manager/business analyst, and two team members who support the ILS (Integrated Library System). We are expanding our team to a total of five developers to diversify our skill sets, increase throughput, and support a growing Digital Initiatives program. We collaborate closely with the Infrastructure Support department in monitoring, supporting, and maintaining systems.

How We Work

AD&S practices agile software development as appropriate with emphasis on short iterations, lightweight requirements-gathering, and developer-functional expert partnerships. Our typical week includes Maintenance Monday (dedicated to ticket resolution and application maintenance), daily standups, a sprint planning meeting, and three days of project work. The developer chosen for this position is expected to form productive pairs with developers on our team and spend a good deal of time in pair programming. We value close collaboration (within the Libraries and with other groups on campus), face-to-face communication, and transparency, and we are results-driven while balancing time for fun and innovation.

What We Use

The developers work with open-source software whenever possible. The exception is our ILS which is third-party, but we will soon be able to interact with its catalog data via SQL queries and an API. Our primary languages are Java, PHP, and Ruby, and we use MySQL and PostgreSQL databases. In addition, we support a large installation of DSpace (kb.osu.edu) and a CMS on Silverstripe (library.osu.edu).

Systems Developer/Engineer

Read more about us at: library.osu.edu/blogs/it

Supervision and Essential Duties:

May supervise student employees

Duties Description:

50% Application Development

Designs, develops, implements, and tests new web applications, as a suite of products and services, for delivery via OSU Libraries public and private web sites, library catalog, and/or other web related systems that support, enhance, and extend the strategic and operational goals of the University Libraries; serves as a member of a team of developers working in close collaboration with a significant percentage of time engaged in pair programming; champions an agile and user-centered approach to software development; adheres to professional software engineering best practices, including continuous integration, source code control, and test-driven development; closely collaborates with the project manager in planning sprints and releases, managing product backlogs, and communicating project status; explores, evaluates, and recommends new and alternative technologies and tracks industry trends; designs and maintains MySQL, PostgreSQL and other relational databases; ensures that applications meet ADA web accessibility standards

20% Application Maintenance and Support

maintains, troubleshoots, and refactors legacy web applications, services, and databases;

20% Systems Support

collaborates closely with Infrastructure Support in monitoring, supporting, and maintaining systems; maintains accurate and thorough inventories, stack diagrams, and technical documentation of applications and systems; recommends server configurations and tools that optimize applications and systems for stability, reliability, reuse, security and performance; identifies root causes of systems outages and recommends steps to prevent future systems downtime; monitors the integrity of a multi-tier development environment, including development, staging, and production environments

10% Outreach and Service

demonstrates a strong service orientation and commitment to the strategic goals of the organization; serves on Libraries' committees, working groups, and task forces; expands skills and personal network through participation in university-level technology initiatives and users groups and attendance at conferences, training programs, and workshops

Education and Experience:

Required Qualifications

Bachelor's Degree in computer & information science or engineering, or an equivalent combination of education and experience; programming experience, preferably in open-source programming languages and frameworks such as Ruby on Rails or PHP; experience working with relational databases, such as MySQL or PostgreSQL;

Desired Qualifications

Demonstrated experience working with and/or designing APIs; experience programming in Java; experience in HTML, JavaScript-based frameworks, CSS and responsive design; familiarity with the principles and practices of user experience (UX), web accessibility, and user interface design

Please submit to OHR the below for the required supplemental questions and request no other supplemental questions be created, we want to avoid screening questions which suggest that the example languages are required:

OHIO STATE UNIVERSITY

Systems Developer/Engineer

1.	*Do you have at least 1 year of programming experience? Yes No
2.	*Do you have at least 1 year of experience working with relational databases? Yes No

Position Title: Java / Web Application Developer

Position Classification: Analyst/Programmer Grade 53 Code 1852

Organization: University of Rochester, River Campus Libraries

Full-time – 40 hrs. per week

Position Summary Statement:

Seeking a Java application developer for an exciting opportunity in the Libraries' Digital Initiatives Unit. This position will be responsible for various web development projects serving the evolving needs of the University community. The primary responsibility is to develop the web front-end for our institutional repository system, which is based on MIT's open-source DSpace software. This includes the development of user interfaces as well as back-end connectivity to databases and other web services. The position reports to the Web Initiatives Manager.

Responsibilities:

- Develop software using Java, JavaServer Pages (JSP), Java Servlets, JDBC, SQL, HTML and CSS
- Extend an existing open-source platform for institutional repositories (DSpace) to be used for the University archive and to be shared with institutions across the country
- Collaborate with the MIT DSpace federation and developers at other universities to share code and build working relationships
- Integrate web services including search and retrieval (SRU/W, XML), metadata harvesting (OAI), and streaming (Real/WMP)
- Integrate web applications with various commercial library products
- Participate in the design of software platform architectures and databases
- Work closely with members of the Digital Initiatives Unit including the Web Initiatives Manager, Graphic Designer, Social Scientist, and other developers to understand project requirements and carry out project planning, tracking, and implementation activities
- Produce well designed, documented, and tested code.
- Deploy and maintain the code base for completed applications

Qualifications and Experience (Required):

- A Bachelor's degree in Computer Science or similar
- Experience in Java, JSP, Servlets and other Java Technologies
- Experience with database design and programming (JDBC, SQL)
- Experience with website development (HTML, CSS)
- Evidence of development experience (screen shots, code samples)
- Experience integrating web applications with various components and web services
- Ability to work collaboratively with diverse groups in project planning and development
- Ability to handle simultaneous projects and clearly articulate how the project tasks are being prioritized
- Experience with software design methods, models, and standards.
- Excellent oral and written communication skills and above average technical aptitude

Qualifications and Experience (Preferred):

UNIVERSITY OF ROCHESTER

Java/Web Application Developer

- Experience with XML and XSLT
 Familiarity with metadata standards and schemas
 Basic knowledge of Photoshop
 Experience with Anache, Tomcat, Java Mail, LAE
- Experience with Apache, Tomcat, Java Mail, JAF, and PostgreSQL
- Familiarity with persistent identifiers and the Digital Object Identifier System
- Familiarity with library technologies and standards

JOB TITLE: Programmer Analyst

DEPARTMENT: University Library, University of Saskatchewan

PRIMARY PURPOSE: To provide effective management of library applications and servers to support the teaching, learning and research needs of the University of Saskatchewan (U of S) community.

NATURE OF WORK: Reporting to the Library Systems and Information Technology (LS & IT) Project Manager, the programmer/analyst works as part of a professional IT services team to provide senior-level programming, analysis and systems administration for applications and servers. The Programmer/Analyst will be responsible for the implementation of new systems as well as the enhancement, maintenance and support of existing ones.

The work requires a breadth of knowledge and skill in both application development and server management. Programmer/Analysts are regularly tasked with solving complex, challenging problems and succeed through continual learning and the application of new technologies. The Programmer/Analyst is fully responsible for the design, development and testing of solutions that will meet client needs. There may be times where the Programmer/Analyst is expected to act as a technical lead for a team of programmers and should be able to identify and assign tasks accordingly. As an experienced member of the team, the programmer/analyst will be expected to provide leadership and guidance regarding best practices in application development and server management. The incumbent is required to balance multiple and sometimes competing priorities, deadlines and expectations. The incumbent must possess effective leadership, communication and organizational skills to contribute effectively. Occasional weekend and evening work will be required.

LS&IT provides services to the University Library and the Saskatchewan Health Information Resources Partnership (SHIRP). The library operates Innovative Interfaces' integrated library system including the online catalogue, circulation, acquisitions, cataloguing, electronic resources and patron web services modules; Ex Libris resource discovery tool (Primo) and link resolver (SFX); OCLC ILL software (VDX), Drupal, Solr, Cascade Server, Content DM, D-Space, Shibboleth, OpenURL, EZ Proxy and LDAP schema; hosts and administers Windows and Linux servers.

ACCOUNTABILITIES:

- Ensures IT systems are designed and implemented to meet client needs and in accordance with library and university standards of practice
- Ensures uninterrupted and reliable access to library services and resources is available for all patrons
- Ensures the safety, security and integrity of the library's data and systems are maintained to limit
 exposure to undue risk
- Ensures effective troubleshooting, problem-solving and investigation, training and user support is provided
- Provides expertise and information to allow for effective IT-related planning and decisions that support the unit's goals and objectives.
- Ensures that leading practices in programming and systems administration are identified, standards
 of practice are defined and used, and encourages the continual improvement of LS & IT services
- Contributes to a positive team environment within the unit through effective communication and collaboration
- Builds and fosters collaborative relationships with organizations both internal and external to LS&IT

QUALIFICATIONS

Education: An undergraduate degree in Computer Science or a related discipline.

Experience: A minimum of 5 years experience as an application developer in a Linux environment. Demonstrated experience in requirements analysis and software architectural design; vendor software implementation and customization; web application development and database design; network security and authentication; application development and code management tools and directing the work of other developers. Preference will be given to candidates with previous Linux systems administration experience

UNIVERSITY OF SASKATCHEWAN

Programmer Analyst

in a virtual environment. Experience with mobile application and/or java web application development would be an asset. Skills: Demonstrated ability to develop and integrate user-friendly applications within a database environment using PHP frameworks, Javascript, XML, SQL; demonstrated ability to develop web applications using a WCMS (Cascade, Drupal, or other); demonstrated ability to organize work, set priorities and meet deadlines, work independently and use initiative; demonstrated ability to provide mentorship and guidance to junior programmers, effective interpersonal and communication skills to build and maintain relationships with various campus organizations, clients and co-workers; ability to work collaboratively in a challenging environment; and effective investigative, analytical and problem-solving

POS	THE UNIVERSITY OF TE SITION DESCRIPTION QUES	
POSITION INFORMATION:		
Name of Current Holder (if oc	cupied):	Personnel No.:
IRIS Position Number:		Pay Grade: 40
Position Title: IT Admin II		
Job Title: Programmer, Digita	l Initiatives	
Name of Supervisor:		Phone:
Responsible Cost Center Nun	nber and Name: E01-6010 (L	ibrary)
Department Contact:	Email address:	Phone:
Reorganization _X_ Standard Review CVacant Position	quest (Significant Change in Cycle cumbent: fy):	
Analysis: KH	PS	ACC
Total Points:		Pov Crada
Job Title: Job Family:	-	Pay Grade:
FLSA Category:Exemp		
Comments:	Non-Exempt	
oominents.		

Digital Initiatives Programmer 1

Name of Current Holder (if occupied):	
Position No.:	

A. POSITION SUMMARY:

Why (or for what reason) does this position exist?

One of the University of Tennessee Libraries' high priority strategic goals is to provide comprehensive and efficient access to our users where they are. The work of the individual in this position is vital to successfully meeting this goal.

This position resides in the department of Digital Initiatives within the University of Tennessee Libraries and serves as a programmer and system administrator. Programming duties include developing new and extending existing open-source platforms and vendor provided solutions in order to help the Libraries deliver high quality digital collections and other services as needed. System administration duties include responsibility for a number of enterprise class Linux servers, both physical and virtual, and range from operating system level implementation and maintenance to programming custom authentication and access to services.

The person in this position will work with minimal supervision both independently and collaboratively as part of a team of library computer programmers. This position will complete projects as assigned to them by the Assistant Professor and Systems Development Librarian (to whom they will report). When assigned tasks, this position will be responsible for choosing the best computer programming languages, software, and hardware in order to complete projects within the required deadline and budget. The position will be expected to work with minimal supervision and to make sure that completed projects function as detailed in the initial request and meet the goals of the project overall.

The person in this position will create specifications for complex library information systems and software using accepted systems analysis techniques and procedures and in consultation with other library and university programmers, systems administrators, technical support staff, and end users. These system specifications will be utilized to design, develop, test, document, and implement new computer programs and information systems and technologies as well as to modify, enhance, and extend existing information systems and technologies already in place within the UTK Libraries.

B. MEASURES OF IMPACT:

What areas does this position impact? (Mark all that apply):

☐ Program	
⊠ Department	University
□ Division/College	External to the University

Describe the level of responsibility this position has in the area(s) checked above.

Department (University of Tennessee Digital Initiatives

Will share with other members of Digital Initiatives the responsibility for identifying, investigating, integrating, and creating new and emerging technologies in support of library operations, goals, and end-user information-seeking needs. Will provide support for administering resources used by other department members such as web services, networked connections, and authentication.

Division/College (Library)

Position Description Questionnaire Rev. 2/1/13 2

Digital Initiatives Programmer 1

Will be responsible for ensuring the library meets the strategic goal of providing comprehensive and efficient access to our users where they are.

Campus

Will greatly improve access to virtual library information resources for campus faculty, staff, and students such that they will be able to more efficiently and effectively conduct research, teach, and complete coursework.

University

Supports the university's teaching and research mission by working to develop more effective and efficient ways for faculty, staff, and students to access virtual information resources equally across the state regardless of physical location.

External to the University

Knowledge, techniques, solutions, code, documentation, and so on developed by this position will be shared with external library, university, and information technology communities.

What type of budget impact does this position have on the area(s) for which it is responsible?

Full authority to commit funds (Explain)*	Size of budget impacted
Effective recommendations to commit funds (Explain)*	Size of budget impacted \$100,000-
Maintain or audit funds committed (Explain)*	Size of budget impacted

*Explanation:

Provides technical expertise in evaluating the costs of implementing, developing, and supporting emerging technologies and recommends accordingly the purchase of all necessary hardware, software, or other equipment.

The server hardware that will host all or part of the new programs, systems, and services created as a result of this position, and for which the library will have to budget for the ongoing management, maintenance, and periodic replacement of, is valued in excess of \$100,000.

C. POSITION DUTIES:

What are the essential functions and responsibilities of this position (please indicate approximate percentage of time devoted to each function)?

Function/Responsibility

% of Time

Programming

50%

Fulfill library-centric information technology needs by developing custom in-house computer programs, systems and services.

Enhance the performance and usability of existing library-centric information technology by optimizing and extending computer programs, systems, and services.

Automate tasks so work can be carried out by others.

Customize open source and commercial computer programs, systems, and services.

Position Description Questionnaire Rev. 2/1/13 3

UNIVERSITY OF TENNESSEE

Digital Initiatives Programmer 1

Integrate custom-developed technology into existing computer systems and services.

Implement new online delivery systems as needed.

Provide ongoing upgrades, enhancements, security patches, and bug fixes to implemented computer programs, systems, and services.

System Administration

250/

Work closely with departmental system administrators to develop, implement, and carry out procedures for both immediate and long-term administration and support of all new information technology computer programs, systems, and services this position is responsible for creating and implementing.

At a minimum this includes:

Work as a part of a team of admins to manage digital library program servers and maintain all server software and hardware for each implementation including software upgrades.

Training other departmental system administrators on newly implemented technologies.

Work closely with departmental server administrators to continually maintain and improve the stability, availability (up time), performance, and security of implemented computer programs, systems, and services.

Work closely with departmental backup server administrators to perform disaster planning that ensures all data for implemented computer programs, systems, and services is backed up and fully recoverable in the event of catastrophic system failure.

Troubleshooting any problems that may occur and developing and implementing solutions and procedures designed to minimize the chance of their recurrence in the future.

Collaboration 25%

Collaborate with department members, faculty librarians, and other library staff on assigned information technology development projects.

At a minimum this includes:

Attend and contribute to project-related meetings.

Commit custom development and modification of existing code into a shared revision control system.

Track progress of assigned tasks and keep clear lines of transparency and accountability by using departmental project management tools.

Ensure that assigned tasks are completed on time and within budget in order to ensure the projects and departmental needs are met successfully.

Work with others to solve project-related problems in a timely and effective manner.

Document and share procedures with other department members to ensure long-term sustainability of library systems.

Position Description Questionnaire Rev. 2/1/13

UNIVERSITY OF TENNESSEE

Digital Initiatives Programmer 1

Consult with supervisor and department members to identify and recommend optimal technologies, techniques, and strategies for successful project completion.

Consult with end users, other library programmers and technologists, OIT technologists, and UTK Libraries' faculty and staff concerning user needs, usability requirements, campus computer security requirements, and integration of new programs and services with existing library and university computer systems and services.

Participate with other members of the department on regular on call rotations.

Actively research and evaluate new technologies for the improvement of the digital library program and make recommendations for future information technology development projects.

Provide programming support and guidance for the digital library program and Technical Services metadata creators.

D. DECISIONS:

What types of decisions does this position make?

Performs daily work tasks with minimal supervision.

Determines and recommends the best computer programming languages, practices and techniques, computer hardware and software, and other technology as needed to meet the needs of specific assigned tasks and projects.

What types of decisions are referred to others?

Decisions to change project goals and priorities.

Decisions involving additional funding for projects and technology beyond what has already been approved.

How are decisions implemented?

By the application of education, knowledge, experience, and professional judgment.

E. SUPERVISION:

Wh	at types of supervisory responsibility does this position exercise?
	Hiring, disciplining, supervising, granting increases (Explain)*
	Effective recommendations in hiring, etc. (Explain)*
\boxtimes	Providing work direction to a group of employees (Explain)*
\boxtimes	Assisting others by providing guidance (Explain)*
	Little or no supervisory responsibility

*Explanation:

Position Description Questionnaire Rev. 2/1/13

5

UNIVERSITY OF TENNESSEE

Digital Initiatives Programmer 1

This position will provide technical expertise in software development that will influence all aspects of any development project they are a part of including specific technologies used, software development strategies and techniques, timelines, and costs.

As the expert on the computer programs, systems, and services they will be responsible for implementing, the person in this position will provide guidance to others in the proper use of the computer programs, systems and services within the parameters of their inherent capabilities.

	Number or employees/students that this position	•			
		Students			
	Non-exempt employees	Others (Explain)*			
This p	*Explanation: osition will not serve in a direct supervisory capaci	ty.			
F.	MINIMUM QUALIFICATIONS: What are the minimum qualifications in terms of erequirements of the job which would be required?	ducation, experience, job skills, and physical			
	Education:				
	Bachelor's degree				
	Experience:				
	5-6 years computer programming experience with several years working in a networked or Webbased environment.				
	Mastery of at least two programming languages (For example: JavaScript, PHP, JAVA, Python, Ruby).				
	1-2 years experience working in an enterprise ser	ver environment.			
	Experience or knowledge of media streaming (Fo Xserv server).	r example: Quicktime streaming from an Apple			
	Experience or knowledge of electronic media form	nats (For example: Quicktime, MPEG-4, AAC).			
	Experience or knowledge of mobile device applic development).	ation development (For example: iPhone App			
	Experience or knowledge of SQL or other database environments.				
	Experience or knowledge of Web applications and	d services.			
	Demonstrated experience working with RESTful	and / or SOAP based APIs.			
Position Rev. 2/1/	Description Questionnaire 13				

Digital Initiatives Programmer 1

Experience or knowledge of XML schemas or DTDs such as TEI, KML, or RDF.

Experience or knowledge of libraries, preferably academic libraries.

Job Skills:

Ability to work on unique, one-of-a-kind projects.

Excellent oral and written communication skills.

Ability to work collaboratively with others from diverse personal and professional backgrounds.

Ability to work independently or collaboratively in group settings.

Ability to quickly learn new programming languages and technologies.

Ability to think creatively and problem solve.

Highly flexible.

Physical Requirements: (Please complete attached chart)

G. ADDITIONAL INFORMATION:

Please provide any additional information you believe will assist in understanding this position:

This position will work side-by-side on a daily basis with other programmers and system administrators as they develop and implement new and emerging information technologies in a library environment. The individual in this position will routinely engage in deeply complex technical planning, problem solving, and decision making concerning computer programs, systems, and services which students and faculty teachers and researchers in our university community will depend upon.

The key to success for the individual selected for this position is the ability to quickly learn and smoothly transition to new programming languages/technologies as specific projects demand. Unlike many programmer positions that are focused on a specific core set of technologies, this position will be much more diverse and require great technical agility.

*Attach the Departmental Organizational Chart prepared by your department with names and titles (include to whom this position reports, others who report to the same individual, and who reports to this position).

H. APPROVAL:

This Position Description Questionnaire (PDQ) has been reviewed by the individuals whose signatures appear below, indicating that the PDQ accurately reflects the job content of the position:

Position Description Questionnaire Rev. 2/1/13

	INIVERSITY OF TEN SCRIPTION QUESTI		
OSITION INFORMATION:			
lame of Current Holder (if occupied):		Personnel No.: N/A	
IRIS Position Number:		Pay Grade:	
osition Title:			
ob Title: IT Admin II			
lame of Supervisor:		Phone:	
Responsible Cost Center Number and N	Name:		
Department Contact:	Email address:	Phone:	
REASON FOR EVALUATION:			
New Position			
Reclassification Request (Sig	nificant Change in I	Outies)	
Reorganization			
X Standard Review Cycle			
Vacant Position Name of Last Incumbent:			
Other (Please Specify):			
HR/PERSONNEL USE ONLY:			
Analysis: KH	De.	ACC	
Total Points:	F3		
Job Title:		Pay Grade:	
ob Family:		r ay Glade.	
-	Non-Exempt		
comments:	Hon-Exempt		
omments.			
lame of Current Holder (if occupied):		Position No.:	

Digital Initiatives Programmer 2

A. POSITION SUMMARY:

Why (or for what reason) does this position exist?

One of the University of Tennessee Libraries' high priority strategic goals is to provide comprehensive and efficient access to our users where they are. The work of the individual in this position is vital to successfully meeting this goal.

This position will be a member of the Systems department within the University of Tennessee Libraries and will help jump-start the development and implementation of new and emerging information technologies for enhanced virtual access.

The person in this position will work with minimal supervision both independently and collaboratively as part of a team of library computer programmers. This position will complete projects as assigned to them by the Assistant Professor and Systems Development Librarian (to whom they will report). When assigned tasks, this position will be responsible for choosing the best computer programming languages, software, and hardware in order to complete projects within the required deadline and budget. The position will be expected to work with minimal supervision and to make sure that completed projects function as detailed in the initial request and meet the goals of the project overall.

The person in this position will create specifications for complex library information systems and software using accepted systems analysis techniques and procedures and in consultation with other library and university programmers, systems administrators, technical support staff, and end users. These system specifications will be utilized to design, develop, test, document, and implement new computer programs and information systems and technologies as well as to modify, enhance, and extend existing information systems and technologies already in place within the UTK Libraries.

B. MEASURES OF IMPACT:

What areas does this position impact? (Mark all that apply):

☐ Program	
□ Department	University
☑ Division/College	External to the University

Describe the level of responsibility this position has in the area(s) checked above.

Department (University of Tennessee Systems):

Will share with other members of Systems the responsibility for identifying, investigating, integrating, and creating new and emerging technologies in support of library operations, goals, and end-user information-seeking needs.

Division/College (Library):

Will be responsible for ensuring the library meets the strategic goal of providing comprehensive and efficient access to our users where they are.

Position Description Questionnaire Rev. 2/1/13

UNIVERSITY OF TENNESSEE

Digital Initiatives Programmer 2

Campus:

Will greatly improve access to virtual library information resources for campus faculty, staff, and students such that they will be able to more efficiently and effectively conduct research, teach, and complete coursework.

University:

Supports the university's teaching and research mission by working to develop more effective and efficient ways for faculty, staff, and students to access virtual information resources equally across the state regardless of physical location.

External to the University:

Knowledge, techniques, solutions, code, documentation, and so on developed by this position will be shared with external library, university, and information technology communities.

What type of budget impact does this position have on the area(s) for which it is responsible?

Full authority to commit funds (Explain)*	Size of budget impacted
Effective recommendations to commit funds (Explain)*	Size of budget impacted \$100,000-
Maintain or audit funds committed (Explain)*	Size of budget impacted
∠ Little or no budget responsibility	

C. POSITION DUTIES:

What are the essential functions and responsibilities of this position (please indicate approximate percentage of time devoted to each function)?

Function/Responsibility

% of Time

Programming

50%

- Fulfill library-centric information technology needs by developing custom in-house computer programs, systems and services.
- Enhance the performance and usability of existing library-centric information technology by optimizing and extending computer programs, systems, and services.
- Customize open source and commercial computer programs, systems, and services.
- o Integrate custom-developed technology into existing computer systems and services.
- Provide ongoing upgrades, enhancements, security patches, and bug fixes to implemented computer programs, systems, and services.

Position Description Questionnaire Rev. 2/1/13

^{*}Explanation:

System Administration 15%

Work closely with departmental system administrators to develop, implement, and carry out
procedures for both immediate and long-term administration and support of all new
information technology computer programs, systems, and services this position is responsible
for creating and implementing.

At a minimum this includes:

- Work as the primary system administrator for Mac OS X servers and maintain all server software and hardware for each implementation including software upgrades.
- o Training other departmental system administrators on newly implemented technologies.
- Working closely with departmental server administrators to continually maintain and improve the stability, availability (up time), performance, and security of implemented computer programs, systems, and services.
- Working closely with departmental backup server administrators to perform disaster planning that ensures all data for implemented computer programs, systems, and services is backed up and fully recoverable in the event of catastrophic system failure.
- Troubleshooting any problems that may occur and developing and implementing solutions and procedures designed to minimize the chance of their recurrence in the future.

Collaboration 35%

 Collaborate with department members, faculty librarians, and other library staff on assigned information technology development projects.

At a minimum this includes:

- o Attend and contribute to project-related meetings.
- Ensure that assigned tasks are completed on time and within budget in order to ensure the projects and departmental needs are met successfully.
- Work with others to solve project-related problems in a timely and effective manner.
- Document and share procedures with other department members to ensure long-term sustainability of library systems.
- Consult with supervisor and department members to identify and recommend optimal technologies, techniques, and strategies for successful project completion.
- Consult with end users, other library programmers and technologists, OIT technologists, and UTK Libraries' faculty and staff concerning user needs, usability requirements, campus computer security requirements, and integration of new programs and services with existing library and university computer systems and services.

Position Description Questionnaire Rev 2/1/13

UNIVERSITY OF TENNESSEE

Digital Initiatives Programmer 2

	 Participate with other members of the department on regular on call rotations.
	Make recommendations for future information technology development projects.
	DECISIONS: What types of decisions does this position make?
	Performs daily work tasks with minimal supervision.
	Determines and recommends the best computer programming languages, practices and techniques, computer hardware and software, and other technology as needed to meet the needs of specific assigned tasks and projects.
	What types of decisions are referred to others?
	Decisions to change project goals and priorities.
	Decisions involving additional funding for projects and technology beyond what has already been approved.
	How are decisions implemented?
	By the application of education, knowledge, experience, and professional judgment.
i.	SUPERVISION: What types of supervisory responsibility does this position exercise?
	Hiring, disciplining, supervising, granting increases (Explain)* Effective recommendations in hiring, etc. (Explain)* Providing work direction to a group of employees (Explain)* Assisting others by providing guidance (Explain)* Little or no supervisory responsibility
	*Explanation:
	This position will provide technical expertise in software development that will influence all aspects of any development project they are a part of including specific technologies used, software development strategies and techniques, timelines, and costs.
	As the expert on the computer programs, systems, and services they will be responsible for implementing, the person in this position will provide guidance to others in the proper use of the computer programs, systems and services within the parameters of their inherent capabilities.
	Number or employees/students that this position supervises:
	Exempt employees Students
	Non-exempt employees Others (Explain)*
	*Explanation:
T	his position will not serve in a direct supervisory capacity.
	sition Description Questionnaire 5

Digital Initiatives Programmer 2

F. MINIMUM QUALIFICATIONS:

What are the <u>minimum</u> qualifications in terms of education, experience, job skills, and physical requirements of the job which would be required?

Education:

Bachelor's degree in Computer Science or closely related field.

Experience:

5-6 years computer programming experience with several years working in a networked or Webbased environment.

Mastery of at least two programming languages (For example: PHP, JAVA, Python, Objective-C).

1-2 years experience working in an enterprise server environment.

Experience or knowledge of media streaming (For example: Quicktime streaming from an Apple Xserv server).

Experience or knowledge of electronic media formats (For example: Quicktime, MPEG-4, AAC).

Experience or knowledge of mobile device application development (For example: iPhone App development).

Experience or knowledge of SQL or other database environments.

Experience or knowledge of Web applications and services.

Job Skills:

Ability to work on unique, one-of-a-kind projects.

Excellent oral and written communication skills.

Ability to work collaboratively with others from diverse personal and professional backgrounds.

Ability to work independently or collaboratively in group settings.

Ability to quickly learn new programming languages and technologies.

Ability to think creatively and problem solve.

Highly flexible.

Physical Requirements: (Please complete attached chart)

Position Description Questionnaire Rev. 2/1/13

UNIVERSITY OF TENNESSEE

Digital Initiatives Programmer 2

C	ADDITIONAL	INFORMATION

Please provide any additional information you believe will assist in understanding this position:

This position will work side-by-side on a daily basis with other programmers and system administrators as they develop and implement new and emerging information technologies in a library environment. The individual in this position will routinely engage in deeply complex technical planning, problem solving, and decision making concerning computer programs, systems, and services which students and faculty teachers and researchers in our university community will depend upon.

The key to success for the individual selected for this position is the ability to quickly learn and smoothly transition to new programming languages/technologies as specific projects demand. Unlike many programmer positions that are focused on a specific core set of technologies, this position will be much more diverse and require great technical agility.

*Attach the Departmental Organizational Chart prepared by your department with names and titles (include to whom this position reports, others who report to the same individual, and who reports to this position).

H. APPROVAL: This Position Description Questionnaire (PDQ) has been reviewed by the individuals whose signatures appear below, indicating that the PDQ accurately reflects the job content of the position:				
Employee Signature	Date	Supervisor's Signature	Date	
Dean, Director, or Dept Head	Date			

THE UNIVERSITY OF TENNESSEE, KNOXVILLE LIBRARIES

FACULTY POSITION DESCRIPTION

POSITION TITLE: Systems Development Librarian

DEPARTMENT: Digital Initiatives

NAME:

1. GENERAL FUNCTION

The Systems Development Librarian reports to the Head of Digital Initiatives. This position supervises three exempt level staff members and works in conjunction with them to deliver high-quality digital collections and answer programming needs in UT Libraries' digital library program.

This position also has specific responsibilities in the area of discovery and works with members of Discovery and Technical Services to support, develop, and advance the libraries' discovery platform.

Finally, this position works collaboratively with members of Digital Initiatives and other library departments in the area of emerging technologies to explore, develop, test, and implement ideas for new systems and services using emerging technologies in support of teaching, learning, and the Libraries' strategic goals. These duties include working with faculty and staff throughout the library to implement open source and proprietary web applications and administering the Database of the Smokies.

The position works closely with computer hardware / software vendors, campus computing (OIT), and other external technology groups as appropriate.

2. SPECIFIC DUTIES

Provide technical leadership for digital collections, programming, webapplications, and other online library services and initiatives including the Libraries' discovery interface. Anticipate and track changes in each of these areas and implement system changes and updates as appropriate.

Anticipate and track technology trends. Investigate and test new information technologies and share with colleagues throughout the library. Collaborate with library colleagues to identify ways new technologies, or old technologies used in new ways, can solve problems, meet needs, and create new services. Develop and implement new systems and services based on new technologies as appropriate.

Participate in the management of the Digital Initiatives including supervision of 3

Systems Development Librarian

exempt staff with responsibility for delivering digital collections, systems administration, and programming.

Creative scholarly work including research, publication, and presentations.

Participate in committees, working groups, and task forces, especially at the national level.

FISCAL RESPONSIBILITY

Recommend the purchase of library technology within a prescribed budget and participate in the writing of bid specs for complex, multi-vendor systems as appropriate.

TEACHING

Supervise SIS Practicum students.

QUALIFICATIONS

Required:

ALĀ-accredited master's degree in library or information science. Relevant professional-level technology experience (academic library preferred). Understanding of network standards and protocols. Supervisory experience. Knowledge of developments and trends in information systems, particularly emerging technologies in libraries and higher education. Understanding of Blackboard or similar course management systems. Extensive knowledge of core Web technologies and programming environments including HTML, CSS, and Javascript. Experience with XML, XSLT, and other digital library technologies. Understanding of video streaming technologies. Familiarity with one or more scripting languages such as PHP, Python, Perl, or Ruby. Knowledge of best practices for Web design and usability. Willingness to learn Drupal and work with it on a daily basis. Evidence of excellent written and oral communication skills and ability to work collegially. Demonstrated experience managing complex technical projects. Strong commitment to making technology work for people.

Preferred:

Project management experience. Demonstrated experience with web analytics platforms such as Google Analytics, KISSmetrics, Open Web Analytics, or Piwik. Experience with content management systems and frameworks such as WordPress, Django, Rails, or Drupal.

University of Virginia Position

Employee Details

Employee Last Name: Richeson Employee First Name: Susan Employee Number: 206373

Employee Type:

Title Details

Generic Yes

UVa Job Title: Software Engineer IV-1ITSWEN4K

UVa Job Title Code: 1ITSWEN4K

College and University Personnel Association (CUPA)

Select the CUPA Survey job code that best reflects the primary purpose of the UVa job.

3

Western Management Group's EduComp (WE)

Select the EduComp Survey job code that best reflects the primary purpose of the UVa job. WE - 18817 APPLICATIONS PROGRAMMER/ANALYST 2

WW - 1950 General Programmer/Analyst

CM - [5501] Programmer Analyst

Watson Wyatt (WW)

Select the WW Survey job code that best reflects the primary purpose of

the UVa job.

WW Level Indicator

Select the level.

Additional Surveys

Select additional Survey job code that best reflects the primary purpose of the UVa job.

Market Matches and Range Builder

Market Range - Lower Reference: \$58,116 Market Range - Upper Reference: \$107,515

FLSA Exemption Status: Exempt

Type of Application: Staff Application

EEO Category: Technicians

UNIVERSITY OF VIRGINIA Software Engineer IV

EEO-6 Code: 5

EEO-6 Sub Code: J

IPEDS Category:

Produce and maintain department applications to accomplish business needs. Perform engineering and development work on moderate- to large-scale or complex projects. Perform advanced software analysis, design, and implementation.

Incumbent will address complex problems and will use experience and judgment in creating solutions. Incumbent seeks assistance when significant deviations are proposed, or when unprecedented problems arise. Incumbent develops approaches to problem-solving and anticipates/mitigates potential issues. Incumbent must be be able to quickly modify behavior to align with change; work effectively in ambiguous situations; collaborate internally and externally to create solutions to long-standing problems; consider a variety of quantitative and qualitative factors in decision-making; question current state and make suggestions for improvements; design processes and procedures to ensure quality; and analyze and determine relationships among complex problems and issues

Position Summary:

Impact is felt within the team/department for which the incumbent works and within multiple, coordinating departments. Work quality, decision-making and long-term project management can affect the productivity of students, faculty and/or staff. Impact of errors is substantial and usually university-wide though mostly short-lived.

Interactions are with fellow team members and coordinating team members, but the incumbent will also have interactions with assigned student, faculty, or staff clients. Incumbent works with and may manage external vendors and service providers. Incumbent should possess superior verbal and written communication skills to convey technical guidance and information to users and to provide excellent customer service. Incumbent will train and provide guidance to more junior staff members and provide management with input into performance evaluations. Incumbent may provide guidance to management on critical technology issues. Incumbent is recognized as an technical authority within the University. Incumbent must be able to take actions that respect diversity; follow decisions through to implementation; and act in alignment with University's values.

Emergency Assistance:

May be required to perform other duties as assigned. May be required to assist the agency or state government generally in the event of an emergency declaration by the Governor

Produce and maintain department applications to

Posting Summary:

accomplish business needs. Perform engineering and development work on moderate- to large-scale or complex projects. Perform advanced software analysis, design, and implementation.

Employment Conditions:

EO/AA Statement for Your Organization:

You may use this mandatory UVA EO/AA statement. EOP encourages you to develop a broader EO/AA statement for your School/Department. Your statement must be approved by EOP in advance. The University of Virginia is an affirmative action/equal opportunity employer committed to diversity, equity, and inclusiveness.

Pass message:

Thank you for your interest in this position. Our screening and selection process is currently underway and will continue until a successful candidate is chosen. Should our review of your qualifications result in a decision to pursue your candidacy, we will contact you in the near future.

Fail message:

Thank you for your interest in this position. Your response to the application questions suggests that you do not meet the minimum qualifications for this position. We are pleased with your interest and encourage you to visit our job posting site on a regular basis. We wish you success in your future career.

For Thomas Jefferson, learning was an integral part of life. The "academical village" was created around the assumption that learning is a lifelong and shared process, and that interaction between scholars and students enlivens the pursuit of knowledge.

University Human Resources strives to identify applicants who will contribute as high potential employees, leaders and managers. We employ individuals who foster and promote the University mission and purpose. Successful candidates exemplify uncommon integrity; they are honest, trusted, team-oriented and live the core values of the University. These candidates display great judgment, by practicing evidence-based decision-making. They are strategically focused by contributing to and achieving department goals and vision. They set high performance standards and hold themselves accountable by aggressively executing these standards. These employees also develop a deep passion for the University and the impact it has on students, faculty, alumni and community. Successful candidates identify their personal career goals and development opportunities, and as supervisors, help their staff do the same. They contribute to team success by leading talent, through their individual efforts and by leading and developing their teams.

University Leadership Characteristics:

General Position Information

Organization 31080 LB-Info Technology

School/Unit University Library

UNIVERSITY OF VIRGINIA

Software Engineer IV

Are there formal guidelines, government regulations, policies that must be followed by the position (Exclude UVa & Commonwealth Human Resource Policies that cover all employees)?

No

Primary senior developer/engineer for open source software that is used by institutions across the U.S. and beyond. Stems expertise, skills in Ruby on Rails and other emerging technologies that enable UVa Library to not only maintain its role with peers but to become a respected leader in leading edge software development.

The senior software engineer will address complex problems and will use experience and judgment in creating solutions. She/he seeks assistance when significant deviations are proposed, or when unprecedented problems arise. She/he develops approaches to problemsolving and anticipates/mitigates potential issues. She/he must be able to quickly modify behavior to align with change; work effectively in ambiguous situations; collaborate internally and externally to create solutions to long-standing problems; consider a

variety of quantitative and qualitative factors in decisionmaking; question current state and make suggestions for improvements; design processes and procedures to ensure quality; and analyze and determine relationships among complex problems and issues.

What is the primary purpose of this nosition?

Impact is felt within the team/department for which the senior software engineer works and within multiple, coordinating departments. Work quality, decision-making and long-term project management can affect the productivity of students, faculty and/or staff. Impact of errors is substantial and usually university-wide though mostly short-lived.

Interactions are with fellow team members and coordinating team members, but the senior software engineer will also have interactions with assigned student, faculty, or staff clients. She/he works with and may manage external vendors and service providers. She/he should possess superior verbal and written communication skills to convey technical guidance and information to users and to provide excellent customer service. She/he will train and provide guidance to more junior staff members and provide management with input into performance evaluations. She/he may provide guidance to management on critical technology issues. She/he is recognized as an technical authority within the University. She/he must be able to take actions that respect diversity; follow decisions through to implementation; and act in alignment with University's values.

Cite specific examples of decisions made <u>with</u> supervisory guidance AND specific examples of decisions made <u>without</u> supervisory guidance.

Performs long-term and non-routine assignments with only general supervisory intervention.

Working Title:

SENIOR SOFTWARE ENGINEER

Agency Code:

207 UVA

Integrated System (Oracle) Purchasing Responsibility Assigned?

No

Conflict of Interest Statement

Required:

No

POSITION IDENTIFICATION

US Position Number:

00403

Position Number

C3832

Position Type:

University Managerial and Professional Staff

Job Group

51

Job Group Name

TECHNICAL/PARAPROFESSIONAL - COMPUTER RELATED

Underutilization Class- Female

Yes

Female Availability Rate (%)

38.71

Underutilization Class - Minority

No

Minority Availability Rate (%)

POSITION SUPERVISION

Name:

Lubinsky, Raymond

Position Number

C5407

Employee Number:

131218

Role Title:

Lead Technologist

Employee User

Recruiter Name:

Responsibilities and Duties/Position Information

Percent of Duty Total: 100

2 Records

Responsibility Statement

All Duties supporting the statement

Demonstrate advanced software development techniques in the

Percentage of Time II

Level of Importance

Provide Advanced Software production of software for various projects and services, assigned or self determined. May mentor or lead others in software development strategies and deployment. Gather or refine requirements (user, development, security, etc) where necessary, acting as a technical lead in support of project efforts as assigned. Define project deliverables based on project requirements. Determine and communicate estimated time lines,

assumptions and constraints. Develop, document and support

95

High

Development software development projects as assigned or self determined.

Participate in the development and/or selection and adoption of methodology and tools to manage and deploy software developed. Software development support for tools and utilities to enhance the delivery of Library materials and scholarly work to the students, staff and patrons.

(E)

Stay abreast of trends and developments that pertain to Software Development, data management and application development

tools. Attend relevant courses and conferences. Update and maintain personal development plan, and learning plans. (ongoing). Execute and implement personal development and

learning plans in a timely fashion. (on-going) (A)

5 Average

Qualifications (for Staff Positions)

Preferred knowledge, skills and abilities for an individual performing this position:

Special Licenses, Registration, or Certification:

Education or Training (cite major area or study):

Level and Type of Experience:

Required and Preferred Qualifications

Required Education

Professional

Development

What is the minimum level of formal education **required** to successfully perform the duties and responsibilities of the position? Choose one.

<u>Degree Requirements Analysis</u>

Bachelor's Degree or Equivalent

If degree or equivalent experience required, please specify: (Entries to the right will appear in the posting for this position.)
Degree Requirements Analysis

Bachelor's degree or equivalent experience in Computer Science, MIS, Computer Engineering or related disciplines.

Required Experience

Considerable - 4 to 7 years

If any experience is **required**, please specify kind of experience:

Demonstrated project management skills. Experience developing large or complex software systems.

Required License or Certification:

No

If yes, what is the **required** License

or Certification.

Is Health Care License Required?: No

Advanced knowledge about the requirements and best practices for developing large or complex software systems

Expert knowledge of established programming procedures and programming language; computer flow-charts and of programming logic and codes; current technological developments/trends in area of expertise; and customer

Software Engineer IV

service standards and procedures.

Must be able to create specifications, generate acceptance test requirements, and partition large projects into

individual components.

Ability to identify computer problems and coordinate hardware and/or software solutions; implement and troubleshoot programming changes and modifications; write complex technical instructions in the use of programs and/or program modifications; communicate with and interpret the operational requirements of end-users; investigate and analyze information and draw conclusions; and process computer data and format and generate reports; and analyze

Required Knowledge, Skills and Abilities:

complex business requirements and technical requests.

Required Computer Applications:

Preferred Education

What level of education is preferred to successfully perform the duties and responsibilities of the position? Choose

Master's Degree

If degree or equivalent experience preferred, please specify: (Entries to the right will appear in the posting for this position.)

Master's degree in Computer Science, MIS, Computer Engineering or related discipline.

Preferred Experience

Extensive - 7 years plus

Tomcat or JBoss).

Preferred Experience

Demonstrated experience in developing and documenting complex Perl, Ruby and/or shell scripts. Demonstrated experience in developing and documenting C, C++, or Java programs. Demonstrated experience in Unix systems use and general shell programming. Demonstrated experience in Java web application development and support (such as

If any experience is preferred, please specify kind of experience:

Preferred License or Certification:

If yes, what is the preferred License or Certification.

Preferred Knowledge, Skills and Abilities

Preferred Computer Applications:

Level of Independent Activity (for Staff Positions)

In terms of overall job responsibilities, to what degree does an incumbent determine own work priorities? Choose one.

Determines priorities more than 50% of time

If yes, please explain, include what policies, formal guidelines or government regulations are involved:

To what degree does this position require decision-making or problem solving skills, as a primary function of the position? (This normally involves analyzing and synthesizing complex

UNIVERSITY OF VIRGINIA

Software Engineer IV

information or recommendations from several sources). Choose one.

Does this position have budgetary responsibilities (Normally, would not include single function duties such as data entry or data collection)?

No

If yes, please describe the extent of these responsibilities to include number and dollar value of accounts and/or grants. For grants positions, designate pre and/or post award.

Contacts of Position (for Staff Positions)

3 Records

Offices or Organizations	Purpose of Contact	Level of Contact	Frequency of Contact
UVA faculty, students, staff	Communication regarding project support	Inside UVA	Weekly
Colleagues at similar institutions or in related industry	Communication regarding tools, techniques, or applications	Outside UVA	As Needed
Software Engineer team within Library	Serves as a resource to other software engineers on complex problems. Will often train lower level software engineers on work processes and policies and assist management with developing their technical skills.	Inside UVA	As Needed

Reporting Relationships (for Staff Positions)

No Records Found

Working Conditions and Physical Requirements (for Staff Positions)

Environment

Check the appropriate box(es) that best describes the environment in which the primary function of the position is performed.

Office Environment

If you have indicated "Other Environment", if work tasks involve one or more of the above, or if further explanation is necessary, please use the space provided:

Working Conditions & Exposures

Please describe, in more detail, any of the conditions answered with "Yes"

Physical Requirements

Describe any of the conditions selected above that are in excess of 26% time

Sitting at a desk, working at a computer.

University of Virginia Position

Employee Details

Employee Last Name:

Durbin

Employee First Name:

Michael

Employee Number:

201315

Employee Type:

Title Details

Generic

Yes

UVa Job Title:

Systems Engineer V-1ITSYEN5K

UVa Job Title Code:

1ITSYEN5K

College and University Personnel

Association (CUPA)

Select the CUPA Survey job code that best reflects the primary purpose of

the UVa job.

CM - [5505] Systems Programmer, Senior

Western Management Group's EduComp (WE)

Select the EduComp Survey job code that best reflects the primary purpose

of the UVa job.

No Response

Watson Wyatt (WW)

Select the WW Survey job code that best reflects the primary purpose of

the UVa job.

No Response

WW Level Indicator

Select the level.

No Response

Additional Surveys

Select additional Survey job code that best reflects the primary purpose of the UVa job.

Market Matches and Range Builder

Market Range - Lower Reference:

\$70,203

Market Range - Upper Reference:

\$140,405

FLSA Exemption Status:

Exempt

Type of Application:

Staff Application

EEO Category:

Technicians

UNIVERSITY OF VIRGINIA

Systems Engineer V

EEO-6 Code:

5

EEO-6 Sub Code:

J

IPEDS Category:

Function as a senior engineer/architect; assess technology trends, issues and define technical solutions to meet University technology needs. Ensure the stability, integrity, and efficient operation of the in-house information systems that support core university functions. This is achieved by developing, monitoring, maintaining, supporting, and optimizing software and associated hardware and operating systems. Provide functional and empirical analysis related to the design, development, and implementation of systems, including hardware utility software, development software, and diagnostic software. Provide system integration and security plans and implementation.

Incumbent will address complex problems and will use experience and judgment in creating solutions. Incumbent seeks assistance when significant deviations are proposed, or when unprecedented problems arise. Incumbent develops approaches to problem-solving and anticipates/mitigates potential issues.

Position Summary:

Impact is felt within the team/department for which the incumbent works and within multiple, coordinating departments. Work quality, decision-making and long-term project management can affect the productivity of students, faculty and/or staff. Impact of errors is substantial and usually university-wide though mostly short-lived.

Interactions are with fellow team members and coordinating team members, but the incumbent will also have interactions with assigned student, faculty, or staff clients. Incumbent works with and may manage external vendors and service providers. Incumbent should possess superior verbal and written communication skills to convey technical guidance and information to users and to provide excellent customer service. Incumbent will train and provide guidance to more junior staff members and provide management with input into performance evaluations. Incumbent may provide guidance to management on critical technology issues. Incumbent is recognized as an technical authority within the University.

Emergency Assistance:

May be required to perform other duties as assigned. May be required to assist the agency or state government generally in the event of an emergency declaration by the Governor.

Function as a senior engineer/architect; assess technology trends, Issues and define technical solutions to meet University technology needs. Ensure the stability, integrity, and efficient operation of the in-house information systems that support core university functions. This is achieved by developing, monitoring, maintaining, supporting, and

Systems Engineer V

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Employment Conditions:

Posting Summary:

EO/AA Statement for Your Organization:

You may use this mandatory UVA EO/AA statement. EOP encourages you to develop a broader EO/AA statement for your School/Department. Your statement must be approved by EOP in advance. The University of Virginia is an affirmative action/equal opportunity employer committed to diversity, equity, and inclusiveness.

Pass message:

Thank you for your interest in this position. Our screening and selection process is currently underway and will continue until a successful candidate is chosen. Should our review of your qualifications result in a decision to pursue your candidacy, we will contact you in the near future.

Thank you for your interest in this position. Your response to the application questions suggests that you do not meet the minimum qualifications for this position. We are pleased with your interest and encourage you to visit our job posting site on a regular basis. We wish you success in your future career.

Fail message:

For Thomas Jefferson, learning was an integral part of life. The "academical village" was created around the assumption that learning is a lifelong and shared process, and that interaction between scholars and students enlivens the pursuit of knowledge.

University Human Resources strives to identify applicants who will contribute as high potential employees, leaders and managers. We employ individuals who foster and promote the University mission and purpose. Successful candidates exemplify uncommon integrity; they are honest, trusted, team-oriented and live the core values of the University. These candidates display great judgment, by practicing evidence-based decision-making. They are strategically focused by contributing to and achieving department goals and vision. They set high performance standards and hold themselves accountable by aggressively executing these standards. These employees also develop a deep passion for the University and the impact it has on students, faculty, alumni and community. Successful candidates identify their personal career goals and development opportunities, and as supervisors, help their staff do the same. They contribute to team success by leading talent, through their individual efforts and by leading and developing their teams.

University Leadership Characteristics:

General Position Information

31080 LB-Info Technology Organization

School/Unit University Library

Are there formal guidelines, government regulations, policies that

No

must be followed by the position (Exclude UVa & Commonwealth Human Resource Policies that cover all employees)?

> Function as a senior engineer/architect; assess technology trends, issues and define technical solutions to meet University technology needs. Ensure the stability, integrity, and efficient operation of the in-house information systems that support core university functions. This is achieved by developing, monitoring, maintaining, supporting, and optimizing software and associated hardware and operating systems. Provide functional and empirical analysis related to the design, development, and implementation of systems, including hardware utility software, development software, and diagnostic software. Provide system integration and security plans and implementation.

What is the primary purpose of this position?

> Incumbent will address complex problems and will use experience and judgment in creating solutions. Incumbent seeks assistance when significant deviations are proposed, or when unprecedented problems arise. Incumbent develops approaches to problem-solving and anticipates/mitigates potential issues.

The employee and supervisor agree on strategic direction,

Systems Engineer V

Cite specific examples of decisions made <u>with</u> supervisory guidance AND specific examples of decisions made <u>without</u> supervisory guidance.

technologies, projects, project plans, and priorities. The supervisor is involved in decisions that impact projects, services, resources and timeframes. This position would research, analyze and propose a design, then with supervisory guidance develop a plan for prioritization and implementation. This position might decide without supervisory guidance how to conduct research, best approach to developing prototypes, or the best approach to solving a performance issue.

Working Title:

Sr Software & Systems Engineer

Agency Code:

207 UVA

Integrated System (Oracle)
Purchasing Responsibility Assigned?

No

Conflict of Interest Statement Required:

No

POSITION IDENTIFICATION

US Position Number:

08884

Position Number

C5702

Position Type:

University Managerial and Professional Staff

Job Group

5J

Job Group Name

TECHNICAL/PARAPROFESSIONAL - COMPUTER RELATED

Underutilization Class- Female

Yes

Female Availability Rate (%)

38.71

Underutilization Class - Minority

No

Minority Availability Rate (%)

POSITION SUPERVISION

Name:

Lubinsky, Raymond

Position Number

C5407

Employee Number:

131218

Role Title:

Director, Online Library Environment

Employee User

Recruiter Name:

Responsibilities and Duties/Position Information

Percent of Duty Total: 100

4 Records

Responsibility Statement	All Duties supporting the statement	Percentage of Time	Level of Importance
	Act as lead developer, working both independently and as part of larger teams to manage medium to large complexity development projects from start to finish. (E)		
	2. Responsible for research, planning, analysis, and design, as well as the engineering and development work needed to implement applications and systems in support of UVa Library's business needs. (E)		
Software and	3. Develop test plans and implement them for systems and software developed. (E) $$	75	High
System Design and Development	4. Provide research in the area of primary responsibility. (E)	75	Hìgh
	5. Participates in the system architecture efforts by (a) adhering to institution and departmental enterprise architecture (b) review and evaluation of existing systems (c) making recommendations for any needed changes (d) assisting in the implementation of necessary changes. (E)		
	6. Routinely coordinate and/or participate in multiple projects, managing time effectively. (E)		
	Monitor performance and functioning of UVa Library services and systems for which the employee has primary or secondary responsibility. (E)		
	2. Provide accurate diagnosis and solutions for routine problems and with the help of other staff diagnose and fix more complex problems. (E)		
	3. Participate in on-call rotation which provides 24x7 coverage of all UVa Library systems and services. (E)		
Service Monitoring, Diagnosis and	4. Provide assistance to the on-call staff with response and repair. (E) $$	15	High
Repair	5. Respond to routine requests for information within one working day. (E) $$		
	6. Respond to urgent or emergency requests within 2 hours. (E)		
	7. Correct interruptions to critical services within 24 hours. (E)		
	8. Notify all affected users and staff as soon as is possible during and after any service interruption (and at least 48 hours before any planned service interruption.) (E)		
	1. Provide technical assistance and information to staff, collaborative partners and users in a courteous and timely manner. (E)		
Consulting & Technical Support	2. Respond to requests for information from internal or external customers or partners within one working day. (E)	5	Average
	Provide accurate and timely consultation with representatives of vendor companies to facilitate problem resolution. (E)		

5. Train appropriate staff as needed. (E)

1. Complete suggested training within specified time and bring knowledge acquired back to share with others in the group or use in daily activities. (E)

Professional Development

2. Take responsibility for seeking out training opportunities with others. (E)

Average 5

Qualifications (for Staff Positions)

Preferred knowledge, skills and abilities for an Individual performing this position:

Special Licenses, Registration, or Certification:

Education or Training (cite major area or study):

Level and Type of Experience:

Required and Preferred Qualifications

Required Education

What is the minimum level of formal education required to successfully perform the duties and responsibilities of the position? Choose one. Degree Requirements Analysis

Bachelor's Degree or Equivalent

If degree or equivalent experience required, please specify: (Entries to the right will appear in the posting for this position.) Degree Requirements Analysis

Bachelor's degree or equivalent experience in Computer Science, MIS, Computer Engineering or related discipline.

Required Experience

Extensive - 7 years plus

If any experience is required, please specify kind of experience:

Minimum 7 years of experience in design, development deployment and maintenance of Enterprise class software

and systems.

Required License or Certification:

If yes, what is the required License

or Certification.

No

No

Is Health Care License Required?:

*Working knowledge of several programming languages. *Working knowledge of software design methodologies including object oriented design.

*Experience in design and development of enterprise class

Required Knowledge, Skills and Abilities:

*Ability to develop solutions with version control, logging, monitoring, testing and deployment mechanisms.

*Ability to perform enterprise scale application performance tuning.

*Knowledge of UNIX operating systems, including Linux. *Experience developing enterprise class software in Java.

Required Computer Applications:	
Preferred Education	
What level of education is preferred to successfully perform the duties and responsibilities of the position? Choose one.	Master's Degree
If degree or equivalent experience preferred, please specify: (Entries to the right will appear in the posting for this position.)	Master's degree in Computer Science, MIS, Computer Engineering or related discipline.
Preferred Experience	No Response
Preferred Experience	
If any experience is preferred , please specify kind of experience:	
Preferred License or Certification:	
If yes, what is the preferred License or Certification.	
	*Working knowledge of encryption methods. *Working knowledge of designing and developing systems to leverage external authentication methods. *Working knowledge of MySQL design and implementation.
Abilities;	*Working knowledge of Rails systems design methodology. *Working knowledge of the Ruby programming language. *Working knowledge of metadata standards. *Working knowledge of digital repositories such as Fedora.
Preferred Computer Applications:	
Level of Independent Activity (for St	aff Positions)
In terms of overall job responsibilities, to what degree does an incumbent determine own work priorities? Choose one.	Determines priorities more than 50% of time
If yes, please explain, include what policies, formal guidelines or government regulations are involved:	
To what degree does this position require decision-making or problem solving skills, as a primary function of the position? (This normally involves analyzing and synthesizing complex information or recommendations from several sources). Choose one.	Overriding job requirement
Does this position have budgetary responsibilities (Normally, would not include single function duties such as data entry or data collection)?	No
If yes, please describe the extent of these responsibilities to include number and dollar value of accounts and/or grants. For grants positions,	

designate pre and/or post award.

Contacts of Position (for Staff Positions) 5 Records Level of Frequency of Offices or Organizations **Purpose of Contact** Contact Contact **UVa Faculty** Inside UVA Provide technical advice, answer questions. As Needed **UVa Staff** Provide technical advice, answer questions. Inside UVA Daily **Open Source** Exchange of information, ideas and Outside UVA As Needed Communities collaborative development. Vendors and Product evaluation, problem reporting and Outside UVA As Needed Consultants Exchange of information, ideas and Other Institutions Outside UVA As Needed collaboration. Reporting Relationships (for Staff Positions) No Records Found Working Conditions and Physical Requirements (for Staff Positions) Environment

Office Environment

explanation is necessary, please use **Working Conditions & Exposures**

Check the appropriate box(es) that best describes the environment in which the primary function of the

Please describe, in more detail, any of the conditions answered with "Yes"

Physical Requirements

position is performed. If you have indicated "Other Environment", if work tasks involve one or more of the above, or if further

the space provided:

Describe any of the conditions selected above that are in excess of This position requires sitting at a desk for long periods (sitting for sustained periods of time) and typing on a keyboard (repetitive motion, use both hands, and fine finger manipulation).

Committee Comments

Comments:

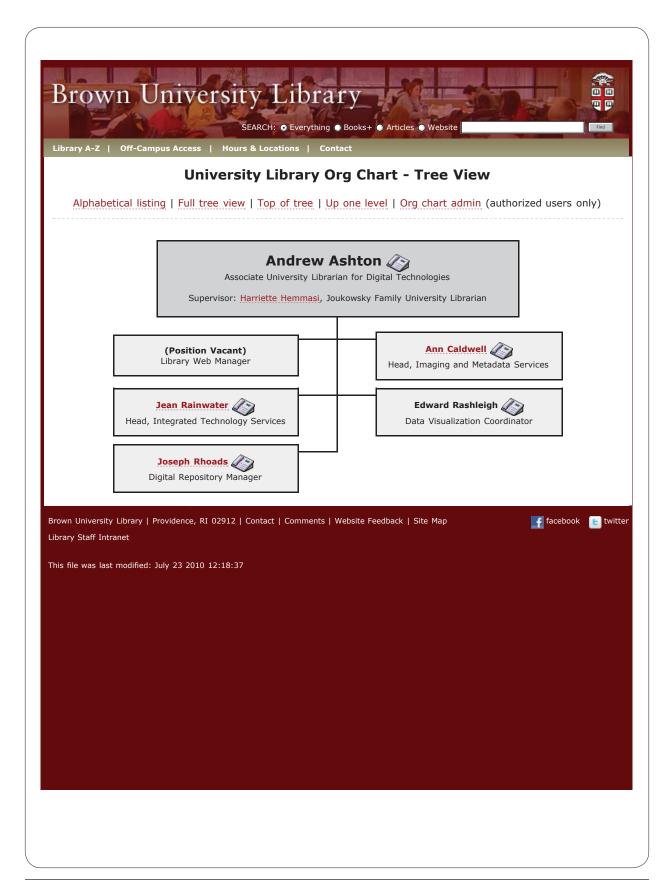
Date

Signature of Employee

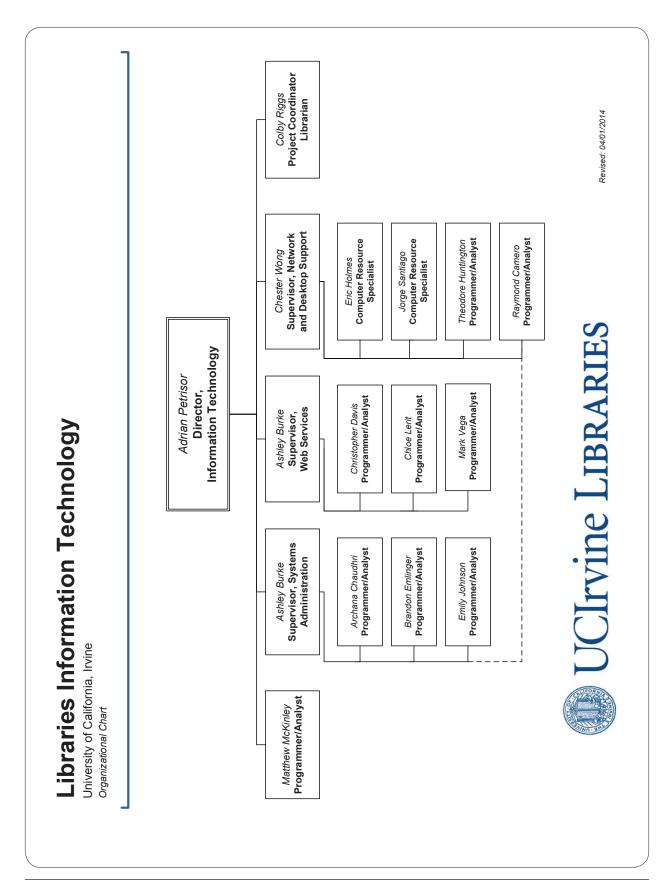
166 · Representative Documents: Job Descriptions of OSS Contributors

Organization Charts

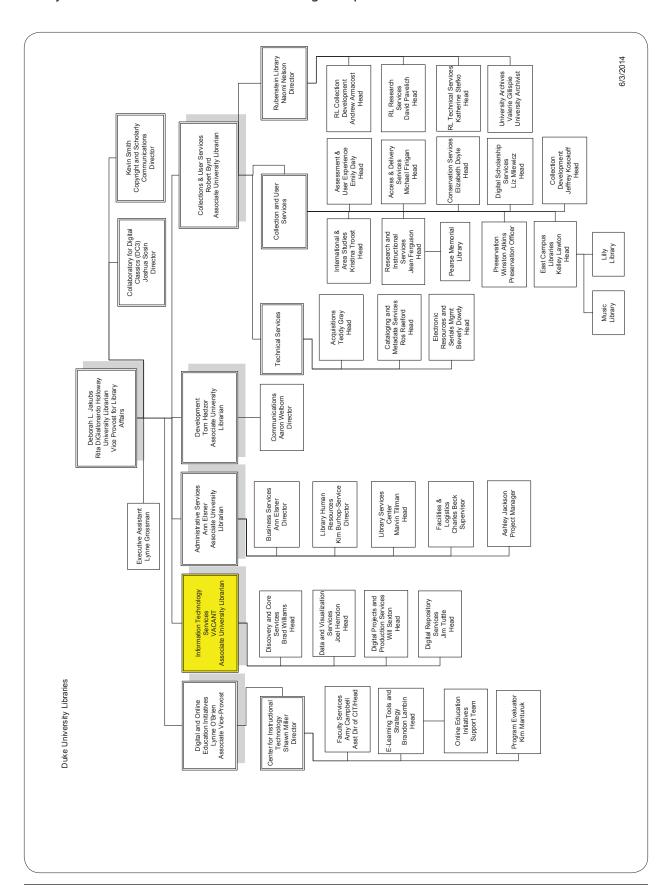
http://library.brown.edu/orgchart/tree.php?id=173



http://staff.lib.uci.edu/departments/orgcharts/docs/it-org-chart.pdf



library.duke.edu/sites/default/files/dul/about/orgchart.pdf



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Library Technologies

http://www.libraries.iub.edu/secure/defiles/LHR/IUB%20Libraries%202013_11.pdf

