Outreach Materials
Welcome to the second Maker Hub Newsletter! In this issue we're excited to announce new tools, new initiatives, and new ways to get making in the Maker Hub.

**New Tools**

Thanks to the generosity of the Ethics Lab (Kennedy School of Ethics) and professor Arjun Drillon, the Maker Hub has a new suite of tools for woodworking and printmaking.

The woodworking and power tools station is equipped with the Festool modular power tool system and a large collection of quality hand tools.

The new print station has a range of paper cutters, corner rounders, and bookbinding materials.

We're still organizing all this new awesomeness, but drop by to take a look and consider the possibilities!

**Help us expand our Open Hours!**

With our new different hours, please fill out our "Open Hours Wallet Survey"!

**Now on Facebook!**

Join our new Facebook Group to follow all the awesomeness and connect with your fellow makers!
Introducing Weekly Jam Sessions

We learn best when we learn together!

Join your like-minded makers at our new weekly “Jam Sessions,” two-hour block set aside for focusing on a particular aspect of making.

While we may sometimes run structured workshops in this time period, usually Jam Sessions are casual, peer-to-peer learning events. You can get an introduction to the topic, learn a new skill, get help on a project, and connect with fellow makers to come up with new ideas and bring them to life in the Maker Hub. Makers of all skill levels are welcome. Jam sessions work best when the group has beginners, journeymen, and experts all hanging out together.

Note: During Jam sessions, the Maker Hub remains open to all other activity. You can still sew during Arduino Thursday, or 3D print on Woodshop Wednesday.

Jam Session Schedule

**CNC Fabrication:**
Tuesdays 3-7pm. Work with Vinyl cutter, the laser cutter and 3D printer. Share techniques for designing with software like Tinkercad, Adobe Illustrator, Fusion 360, and more. Show off your work and brainstorm new ideas with other CNC enthusiasts.

**Woodshop:**
Wednesdays 5-7pm. Learn how to use the Maker Hub’s power tools and hand tools. Learn and share techniques for working with wood and other traditional construction materials.

**Be a Maker Hub Volunteer**
Help us build our community of makers at Georgetown and expand our impact on campus by becoming a Maker Hub Volunteer Monitor! Volunteers get access to the space during non-open hours in return for working at least 2 hours per week in the Maker Hub. [Click here for details!]

**Tell Your Friends!**
Please support the Maker Hub by spreading the word. Forward this email to friends, classmates, professors and casual acquaintances that might be interested. They will thank you later!
Get help on your projects, partner with other makers, and come up with new ideas.

Arduino, Pi, and Electronics: Thursday 3-7pm. Dive into the world of physical computing with platforms like Arduino and Raspberry Pi. Learn the basics of electronics and how to connect analog and digital worlds together. Get help with your projects, or get an introduction to a new tool or technology.

Textiles: Fridays 3-6pm. Learn how to knit, crochet, sew, weave, and more. Bring some jeans to repair, a pattern to make from scratch, or work with others to come up with new designs.

We Take Donations! Cleaning out the garage or closet? The Maker Hub is accepting donations of any tools, electronics, equipment, and supplies. It need not be working, but if the donation is large, let us know in advance. In particular we need:

- Lab coats, aprons, utility vests
- Vintage AV Gear
- Projectors, cameras, and anything with lenses
- Old video game systems
- Legos and other construction kits
- Thread, fabric, and sewing supplies
- Woodworking tools
- Scrap acrylic sheets and wood for the laser cutter

Contact
Website
Email
Location
First Floor, Law School Library, Georgetown University
Open Hours
Mon, Fri, 10am - 7pm
Tue, Wed, Thu: 10am - 8pm

Join our Google Group!
Share ideas, find collaborators, ask questions, and keep up with all the goings-on in the Hub by joining our google group. Note: email to the google group may be more frequent than our newsletter, but you can subscribe to a daily or weekly digest.
Code+Art Visualization Contest

ANNOUNCING THE WINNERS OF THE 2017 CODE+ART STUDENT VISUALIZATION CONTEST!

- Grand prize: Nathenie Brooks, ‘Burst of Color’ (top left)
- Second: Tyler Meyers, ‘Carnival Claws’ (top right)
- Third: Simon Park, Julia Linebenef, Hilary Smith, Lucas Garag, Conor Shipway, Natarun Sumprukulak, & Monica Nguyen, ‘Paper SWIV VR’ (lower left)
- Honorable mention: Nicholas Beam and Matthew Meeks, ‘On the Origin of Fishes’ (lower right)

Read about the winning pieces in our news article!
What is it?
The NCSU Libraries is pleased to announce its third annual Code+Art Student Visualization Contest. Students are invited to create visualizations that may be data art pieces, procedural environments, or virtual reality experiences. Entries will compete for cash prizes and winners will be announced April 20, 2017.

Purpose
Libraries have long been places where people have explored new ways of interacting with information. We invite students to create visualizations that give visitors a taste of the possibilities that await them inside our Libraries.

What are we looking for?
We are looking for attractive visualizations that are created with a computer. Submissions in the following categories will be accepted:
• Data visualization / data art
• Generative art
• Procedurally generated environments (game environments, for example)
• Virtual or augmented reality experiences

Note: We are especially interested in “massively responsive” web-based work that could be displayed on the Hunt Library video walls.

Prizes
• First - $400
• Second - $200
• Third - $100

Winners are responsible for any tax implications. There is a greater impact on nonresident aliens who are subject to US tax of 30% for prizes and awards and additional State of North Carolina taxes. There are also several pieces of legal documentation required in order to process the pay out for nonresident aliens (W-4BEN, visa, passport, I-94).

Who is eligible?
Any NC State undergraduate or graduate student enrolled during Spring 2017 is eligible to enter. Students may enter either individually or in groups. Groups may have both undergraduates and graduates within the same group. Students from all departments in the university are encouraged to enter. Students who graduated in December 2016 are ineligible.

Timeline
April 10, 2017 - Final deadline for entries
April 20, 2017 - Winners notified
Submit your entry

Need Help?
If you have any questions about the contest, available technology, resources, or making visualizations, contact Alison at alison@bresk.edu.
Make-a-thon Inspires Students To Solve Sustainability Challenges

Imagine you're a college student with a creative idea to work out of your comfort zone, wear your student identification card as a small modular on the nearest bike rack and start riding a borrowed bike to class.

That's the idea behind ReCycle, a campus bike sharing concept that uses abandoned bicycles and existing bike racks to minimize infrastructure cost and make bike sharing more accessible to students.

Developed by four NC State students, ReCycle won the grand prize in the university's second annual Make-a-thon, a four-day sustainability innovation competition.

The Feb. 3-5 event brought together 102 students on 36 interdisciplinary teams representing 8 of the university's colleges. Armed with actual campus and community sustainability data, student teams researched, designed and prototyped sustainability innovations using resources ranging from 3D design and internet of things to geographic information systems and microcontrollers.

"Implementing new technologies ... was definitely a difficult, challenging but fun process. We were able to get out of our comfort zone and learn something that was totally new for us," said electrical engineering major Jack Higazy, who helped develop ReCycle.

Make-a-thon is organized by NCSU Libraries, University Sustainability Office and the University Housing and Learning Villages. Engineering Village, Women in Science and Engineering, Book Village and All Access Entrepreneurship Village. With sponsorship from the NC State Sustainability Fund, Autodesk, IBM and several other organizations, students competed for prizes including 3D printers, cash and a consultation session with NC State's social entrepreneur in residence.

A variation of a hack-a-thon with a sustainability twist, Make-a-thon kicked off with R.C. entrepreneur Eric Fehr challenging students to see problems as opportunities for innovation. Then, a day of access to industry experts allowed students to explore the feasibility of their ideas as well as learn new technologies. On the competition's build day, many teams used the Makerspace inside D.H. Hill Library to turn their ideas into prototypes.

"It's such an incredibly fulfilling experience to ... go from an idea on paper to it being printed and physical," said sustainable materials and technology major Maria Patricia Valverde, whose team designed a sensor system to reduce water waste in agriculture.

On the competition's final day—about 72 hours after Make-a-thon began—more than a dozen judges representing industry and campus partnerships listened to teams' product pitches and selected winners.

https://sustainability.ncsu.edu/nc-state-make-a-thon-inspires-sustainability-solutions/
Ideas presented at the Make-a-thon finals ranged from wearables designed to reduce food waste to self-powering lights that improve safety of alternative transportation such as biking and skateboarding. Students prototyped energy-saving, motion-sensored streetlights and plumbing that creates energy as water flows through pipes.

Many ideas stemmed from personal experiences. Industrial design master’s student Penghui Jiang twice missed the Wolfline bus to a career fair because the bus was at capacity, so his team designed an app that enables adjustment of bus routes based on real-time demand.

Other teams designed sustainability improvements to residence halls, such as self-charging motion sensors that turn off lights when restrooms are unoccupied and waste chutes that sort trash and recycling.

All ideas included an interdisciplinary perspective due to a competition requirement that teams include members from at least two of the university’s colleges.

“I joined [Make-a-thon] because it gave me a chance to work with engineers. In a real-world setting, I will have to work with engineers. This helps me a lot,” said economics major Minhla Guha, whose team designed a waterproof solar cube to provide renewable energy during disasters.

Though Make-a-thon is over, many teams indicated their ideas aren’t. Between university funding opportunities such as the Sustainability Fund and the LSU eGenes, it’s possible some projects could become actual products. But even if these ideas remain just ideas, students said the Make-a-thon experience has provided real-world benefit.

“You may not know a lot coming in [to Make-a-thon], but with the mentorship, the technology and the resources available, you can learn a lot and apply this to future career paths you may have,” Voigado said. See more Make-a-thon projects in this Storyfy story.
Step into Startup Culture

Do you have a great business idea that you think could change the world? Well, check out our newest book display on startup culture and social entrepreneurship to learn more about turning your business idea into reality!

Our newest display highlights a variety of books that focus on topics such as running your startup, creating a lean startup, social entrepreneurship and much more. Here are some more details for just a few of the great reads included in this display. The full list of books can be accessed here.

- The Innovator’s Method: Bringing the Lean Startup into your Organization by Nathan Furr and Jeff Dyer
  - Furr and Dyer outline how to make innovative ideas become successful startups and businesses in real-life. This book walks you through the process of refining ideas and turning them into marketable solutions or products.
Representative Documents: Outreach Materials

- **Startup Misology: Tech Cocktail's Guide to Building, Growing, and Celebrating Startup Success** by Frank Gruber
  - The founder of Tech.Co provides you with a framework for creating a tech startup, while also giving readers real-world examples of failures and successes from well-known startups like WordPress and Basecamp.

- **The Real Problem Solvers: Social Entrepreneurs in America** edited by Ruth A. Shaprio
  - Learn about various aspects of social entrepreneurship from this edited book, such as different types of social entrepreneur ventures, how these ventures are funded, and how social entrepreneurship straddles both the non-profit and for-profit worlds.

- **The Art of the Start 2.0: The Time-tested, Battle-hardened Guide for Anyone Starting Anything** by Guy Kawasaki
  - Arianna Huffington classified this book as the “ultimate entrepreneurship handbook”, as it provides clear, actionable advice for a variety of topics, such as idea generation, financing, and getting the word out about your new product or service.

After perusing our display, you can flex your new startup and social entrepreneurship skills by signing up for the third annual Steacie Library Hackfest! The Hackfest will be held on February 17 and 18 at the Steacie Library. York students from all disciplines are welcome to participate. Students will pitch their startup or social entrepreneurship ideas on the morning of the 17th, then they will form teams, and create a minimum viable product to show off during the the final presentations on the afternoon of February 18. The Hackfest's theme this year is **Making a Difference with Data**, so if you have any great ideas for this topic, please make sure to sign-up for the Hackfest as soon as possible.

Enjoy our new book display and we hope to see you at the Hackfest this year!

← Recent Acquisitions, December 21 – December 28, 2015

Recent Acquisitions, January 4 – January 11, 2016 →
YORK UNIVERSITY LIBRARIES
Steacie Library Hackfest 2017
http://hackfest.library.yorku.ca/2017/

Hacking For A Better World
Learn More
Steacie Library Dungeon Hackfest 2017

By York University Libraries

Date: February 22nd – 23rd 2017
Time: 9:00am Feb 22nd – 5:00pm Feb 23rd
Location: Steacie Science and Engineering Library.

Do you love crunching data? Creating breathtaking visualization? Or do want to learn how to do those things? Do you have a brilliant business involving data idea but you are not sure how to build it? Do you think that there’s some wisdom hidden in someone else’s data that can help us understand the world better? Are you a go-getter who will hack your way to your goals?

If you answered “Yes” to any of these questions, we invite you to participate in the Third Steacie Library Hackfest!

What is a Hackfest? If you haven’t been to one, it is about spending two days collaborating with your fellow students on a particular project, and bringing the project to reality! Students from disciplines such as Computer Science and Engineering, Fine Arts, Business, Digital Media, and Health will work together to share ideas and create solutions.

If you want to gain experience bringing an idea to life, or just want to participate in a fun collaborative environment, mark your calendar for the Annual Steacie Library Hackfest supported by LaunchYU, on February 22nd-23rd, 2017. We look forward to seeing you there!

Breakfast, lunch, and caffeine provided!