Outreach Materials
The Maker Hub newsletter keeps you up-to-date on the latest events, opportunities, and resources for our maker community at Georgetown University.

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

New Tools
Thanks to the generosity of the Ethics Lab (Kennedy School of Ethics) and professor Arjun Shilton, 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!
Feel free to let us know if you want us to stay open different hours. Let us know if you have ideas for improving the space.

Now on Facebook!
Join our new Facebook Group to follow all our 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 blocks 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 cutters, the laser cutter and 3D printers. 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 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 societal organizations that might be interested. They will thank you later!
Get help on your projects, partner with other makers, and come up with new ideas.

Arduinos, Pix, 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 3-7pm: 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! If 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
- Virage AV Gear
- Projectors, cameras, and anything with lenses
- Old video game systems
- Lego and other construction kits
- Thread, fabric, and sewing supplies
- Woodworking tools
- Scrap acrylic sheets and wood for the laser cutter

Contact

Website
Email
Follow Us on Facebook

Location

First Floor, Lauinger Library
Georgetown University

Open Hours

Mon-Fri, 11am-7pm
Tue, Wed, Thu: 1-9pm

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: emails 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: Nathanie Brooks, ‘Burst of Color’ (top left)
- Second: Tyler Maybern, ‘Carnival Claws’ (top right)
- Third: Simon Park, Julia Linebarger, Hilary Smith, Lucas Gargano, Conor Shipway, Nattanun Sumpunkutak, & Monica Nguyen, ‘Paper/SwimVR’ (lower left)
- Honorable mention: Nicholas Beam and Matthew Meeks, ‘On the Origin of Fishies’ (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 26, 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 payment for nonresident aliens (W-8BEN, 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 26, 2017 - Winners notified
Submit your entry

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

Imagine you’re a college student who is out of your residence hall, and you need your student identification card at a student union to get your meal plan. You need a bike to get around campus. This is where the idea behind ReCylce, a campus-wide bike-sharing concept, comes in. The concept uses abandoned bikes and existing bike racks to minimize infrastructure costs and make bike-sharing more accessible to students.

Developed by four NC State students, ReCylce won the grand prize in the university’s second annual Make-a-thon, a four-day sustainability innovation competition. The event was held from March 22 to March 24, and brought together 102 students from 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.

“I have always been interested in sustainability, but this is definitely a difficult, challenging but exciting 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 Higginbotham, who helped develop ReCylce.

Make-a-thon is organized by NCSU Libraries, University Sustainability Office, and four University Housing living and learning villages: Engineering Village, Women in Science and Engineering, Book Village, and All About Entrepreneurs Village. The event was sponsored by the NC State Sustainability Fund, Autodesk, IBM, and several other organizations, including students competing for prizes including 3D printers, cash, and a consulting 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 150 entrepreneurs who challenged students to see problems as opportunities for innovation. The event, held on the first day of the competition, drew students from all over the country to learn from industry experts who showed them ideas and potential solutions for problems in the community.

A student works on developing a prototype during the build day of Make-a-thon.

On the competition’s final day—about 30 hours after Make-a-thon began—more than a dozen judges representing industry and campus partnerships listened to teams’ 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 Pengyu 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 bathrooms 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 Mitulita Guha, whose team designed a waterproof solar cube to provide renewable energy during disasters.

Though Make-a-thon is over, many teams indicated they plan to continue their projects. Between university funding opportunities such as the Sustainability Fund and the Lulu 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," Velizgado said.

See more Make-a-thon projects in this Storify story.
Step into Startup Culture

January 7, 2016

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. Shapiro
  - 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 idea on the morning of the 17th, then they will form teams, and create a minimum viable product to show off during 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!
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!