



Olin College of Engineering

Olin Expo Spring 2018

May 14, 2018

Welcome to Olin Expo Spring 2018! We thank you for joining us for this special celebration of our students' work. We have scheduled demonstrations, posters, and interactive presentations over the course of the day, as well as artistic and musical performances. Lunch is available for purchase in our dining hall in the Campus Center, as your time permits. Thank you for being part of Olin Expo!

As you take part in our Expo celebration, we would love for you to **share** your Expo experiences with us. Please fill out a SHARE card before you leave today. The cards can be found at the registration desk.

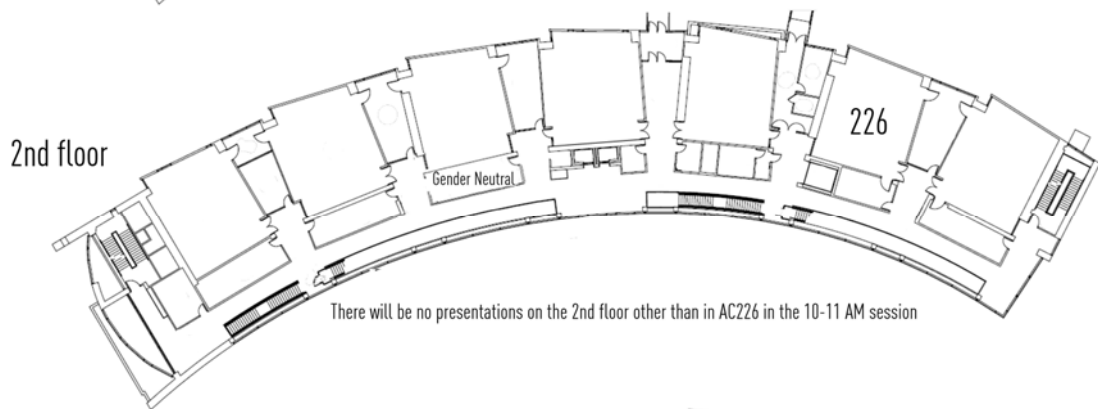
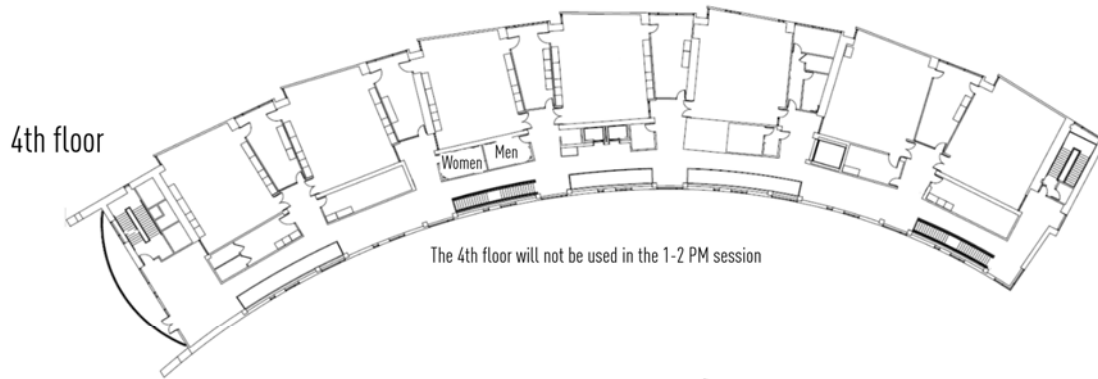
Musical Performances

12:15–1 PM	Jazz <i>Outside (Tent)</i>	Page 3
1:10–2 PM	Celebrating Music at Olin <i>Academic Center 3rd floor music performance area</i>	
2:30–3 PM	Olin Conductorless Orchestra <i>Milas Hall mezzanine</i>	

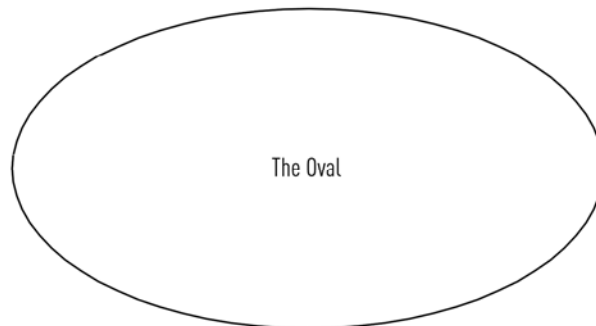
Demonstrations, Posters, Interactive Presentations, and Performances

10–11 AM	Project/Competition Teams: <i>Olin Baja, OARS, Project Gemini, Olin Rocketry, AERO IARC</i> <i>Academic Center 128, 226, 1st, 3rd, and 4th floor hallways</i>	Pages 4–6
	Hallway Posters and Presentations <i>Academic Center 1st, 3rd, and 4th floor hallways</i>	
11 AM–12 PM	Project/Competition Team: <i>Electric Vehicle</i> <i>Outside (Rain: Academic Center 128)</i>	Pages 7–9
	Improv: <i>Olin Performance Improv und Magick</i> <i>Outside (Tent) (Rain: Academic Center 326)</i>	
	Interactive Presentation: <i>Elecanisms Penny Arcade</i> <i>Academic Center 306</i>	
	Hallway Posters and Presentations <i>Academic Center 1st, 3rd, and 4th floor hallways</i>	
1–2 PM	Classroom Presentations: <i>Castle Island Sustainability Initiatives</i> <i>Autonomous Vehicles for Aging Adults</i> <i>Academic Center 326 and 328</i>	Pages 10–11
	Hallway Posters and Presentations <i>Academic Center 1st and 3rd floor hallways</i>	

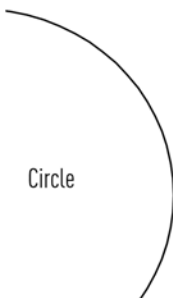
Map of Academic Center



Reception/Registration



Campus Center
Dining Hall 1st Floor



Milas Hall
Mezzanine 2nd Floor

Musical Performances

<i>Time/Topical Area Location</i>	<i>Name(s) of student(s)</i>	<i>Title and description</i>
---------------------------------------	------------------------------	------------------------------

12:15–1 PM

12:15 PM Student life (study away, passionate pursuit, etc). Outside (Tent)	Keenan Zucker, Shreya Rangarajan, Nur Shlapobersky, Emma Westerhoff, Kathryn Hite, Scott Mackinlay, Bill Wong, Byron Wasti, Aurora Buntan	Jazz <i>"It's jazz, baby"</i> –Anonymous
--	---	---

1:10–2 PM

1:10 PM Arts, Humanities and Social Science AC 3rd floor performance corridor	Maximilian Schommer	Beethoven's Pathétique <i>A performance of the first movement of Beethoven's Sonata No. 8, "Pathétique"</i>
1:20 PM Student life (study away, passionate pursuit, etc). AC 3rd floor performance corridor	Kristyn Walker, Kai Levy	Classical Piano <i>A performance of three pieces: Arabesque No. 1 by Debussy, Miaou by Faure, and Prelude No. 1 by Gershwin.</i>
1:35 PM Arts, Humanities and Social Science AC 3rd floor performance corridor	Colvin Chapman, Franton Lin, Gracey Wilson, Gretchen Rice, Katie Butler, Kim Winter, Lauren Gulland, Linnea Laux, Michael Costello, Tatiana Anthony, Tobias Shapinsky, William Lu	PowerChords <i>Sporting their characteristic "flowerchords" since 2007, PowerChords is the oldest a cappella group at Olin College of Engineering. Despite their wide range of interests, they have found unity in all styles of a cappella through powerful arrangement style and electric enthusiasm during performances.</i>

2:30–3 PM

2:30 PM Milas Hall 2 nd floor Mezzanine	Serena Chen, Anne Ku, Connor Novak, Shreya Rangarajan, Brandon Zhang—violins; Emma Pan, Maggie Rosner—violas; Kian Raissian, Emma Westerhoff, Rachel Won—cellos; Jeremy Ryan—flute and piccolo; Eric Miller—alto flute; Katie Hite—flute and bass flute; Sunny Shroff—bass clarinet; Kerry McConnaughay—French horn; Kyle Emmi—trumpet; Diego Alvarez, Paul Nadan—trombones; Joe Sutker—bass trombone; Marie-Caroline Finke—glockenspiel and percussion; Jonah Spicher—piano	Olin Conductorless Orchestra <ul style="list-style-type: none"> • <i>I am the Doctor</i> by Murray Gold • <i>Preludio Sinfonico</i> by Giacomo Puccini • <i>The Magnificent Seven</i> by Elmer Bernstein
--	--	--

10-11 AM

Topical Area Location	Name(s) of student(s)	Title and description
Project/ Competition Team AC128	Manik Singh Sethi, Juan Carlos del Rio, Missouri Lytle, Max Otoadese, Andrew Holmes, Ricky Rose, Ashley Swanson, Erika Serna, Sreekanth Sajjala, Min Jang, Kyle Bertram, Adrian Botran, Rowan Sharman, Aiden Carley-Clopton, Leon Santen	Olin Baja <i>Olin Baja is a team Olin students from all years, practicing mechanical, electrical, and computer engineering to build and race an off-road race car from scratch each year. This year, we developed a brand new car and competed against one hundred schools from around the world and broke some personal records. Come see us before we head to Kansas and destroy more records in a few weeks!</i>
Project Team Robotics/ Mechatronics AC226 (RoboLab)	Kevin Zhang, Yichen Jiang, Hannah Kolano, Ben Ziemann, Cassandra Overney, Sherrie Shen, Khang Vu, Enmo Ren	Project Gemini <i>Edwin has retired since the last EXPO, but Draco has found a new friend, and through the many years of evolution has given birth to the Gemini Twins, Castor and Pollux! Project Gemini is a new kind of project for the Interactive Robotics Laboratory (formerly known as Edwin), where we're kicking things up a notch to create more impactful collaborative interactions between robot and user. Project Gemini is a collaborative construction interaction between you and the twins, Castor and Pollux, where you'll work together to build a structure out deep in "space". Come on over and check out what the Twins are up to!</i>
Project/ Competition Team 1 st floor	Kyle Combes, Anna Griffin, Eric Elder Jacobsen, Katie Thai-Tang, Jane Sieving, Noah D'Souza, Diego Alvarez, Everardo Gonzalez, Rebecca Jordan, Celina Bekins	OARS <i>Olin Aquatic Robotic Systems is on a five-year mission to design and build a sailboat capable of autonomously crossing the Atlantic Ocean. We have just completed our first year of this plan.</i>
Project/ Competition Team 3 rd floor	Kyle Emmi, Braden Oh, Brandon Zhang, Jonah Spicher, Katie Barno, Corey Cochran-Lepiz, William Fairman, Abby Fry, Anusha Datar, Quinn Kelley, Madi Wyatt, Sebastian Calvo	Olin Rocketry <i>Come see Olin Rocketry's newest rocket, the Phoenix 1, freshly returned from its maiden flight. We'll also be discussing next year's plans and future projects.</i>
Project/ Competition Team 4 th floor	Nathan Yee, Adam Selker, Paul Nadan, Jamie Cho, Khang Vu, Eric Miller	AERO IARC <i>Competitive autonomous drones</i>
Bioengineering or Biology 1 st floor	Sarah Deng	The Tumor Suppressor Protein RASSF1A modulates transcriptional activation of NF-AT <i>Epigenetic silencing of the tumor suppressor protein RASSF1A has been described in numerous cancers, and many recent studies suggest utilizing methylation status of this gene as a prognostic marker. Here, we describe a novel role for this protein in the transcription regulation of the transcription factor Nuclear Regulator of Activated T Cells (NFAT) upon T cell engagement.</i>
Computing 1 st floor	David Abrahams, Shane Kelly, Bill Wong	Video Game AI <i>We programmed a bot that plays a capture the flag style video game. Come play against it! It's like a normal AI, but it's a ball of paint.</i>
Design 1 st floor	Lauren Pudvan, Annabel Consilvio, Apurva Raman, William Lu, Kaitlyn Keil Gretchen Rice, Anupama (Ana) Krishnan	Technology Accessibility and Design Projects <i>Learn about various projects we did in the class "Technology Accessibility and Design"</i> Puppies!!!! - The Harness Campaign: Sharing stories, changing lives <i>Harnessing awareness of service, therapy, and emotional support dogs through an impactful, interactive traveling art show. Come see our prototype and talk to us about our process and all things service and therapy dogs!</i>

10-11 AM

Topical Area Location	Name(s) of student(s)	Title and description
Embedded Engineering 1st floor	Byron Wasti	Open Source Smart Watch <i>A fully Open Source Smart Watch which can be built and used by anyone. It has firmware written in Rust and is built to be hackable and personalizable.</i>
Mechanical Engineering 1st floor	Michael Costello	Analysis of blade segmentation in large-scale wind turbines <i>In the quest to lower the cost of renewable energy, wind turbine manufacturers are designing increasingly gigantic turbines, leading to significant challenges in manufacturing, transportation, and assembly. This project examines the feasibility and effectiveness of proposed solutions to manufacture these 60+ meter blades in multiple segmented components.</i>
Robotics/ Mechatronics 1st floor	Katya Soltan, Jamie O'Brien	Miniature Biomimetic Fish Robot <i>MORA (Miniature Oscillating Robotic Agent) is a miniature-scale robot designed to be low-cost and easily assemblable for swarming applications. Its multi-jointed design takes advantage of the superior swimming performance of fish, allowing it to mimic their efficient, undulatory motion.</i>
Arts, Humanities and Social Science 3rd floor	Emily Kohler, Louise Nielsen	Explore: Our Identities in Context <i>A student-led social systems and personal expression course.</i>
Computing 3rd floor	Max Schommer, Matthew Beaudouin-Lafon	CAD Assembly in Augmented Reality <i>The zSpace is an Augmented Reality (AR) screen that allows the user to see and interact with a 3D environment. Using the Unity Engine we built a prototype for what CAD assembly might look like in AR.</i>
	Emma Pan, Libby Tawes, Ever Gonzalez	Pick-up Line Bot <i>We created a machine-learning pick-up line generator that trains by giving name and keyword-specific pick-up lines to people on Tinder and the web. Come try it out!</i>
Design 3rd floor	Emily Lepert, Nick Sherman, Evan Cusato, Ava Lakmazaheri	Service Dog Handler UOCD Project <i>Come see the result of our UOCD project. It's cute, we have dogs.</i>
Electrical Engineering and Computing 3rd floor	Marie-Caroline Finke, Gabriel Butterick	Applications with DSP: Heartbeat sensor <i>After a delve into the land of digital signal processing we are applying that knowledge to identify people's heartbeats from a video. We might be able to differentiate between dog and human too!</i>
Entrepreneurship 3rd floor	Abigail Fry, Cassandra Overney, Erika Lu, Flynn Michael-Legg, Sherrie Shen	Power Drops <i>We will be presenting our Power Drops, which we created for our P&M final project. Power Drops are aesthetically pleasing and weighted extension cables that can be placed on table surfaces to allow for easy access for phone and computer chargers.</i>
Robotics/ Mechatronics 3rd floor	Amy Phung, Connor Novak, Kawin Nikomborirak, Nathan Estill	Robotic Tractor Research <i>Presentation of a semester's worth of development on the Olin Robotics Lab's autonomous tractor, including ground scanning, terraforming, scarifying blade manipulation, and navigation.</i>
Student life (study away, passionate pursuit, etc). 3rd floor	Emily Nasiff, Alison Palmer	Baked Alaska from Scratch <i>This semester we not only learned how to make a Baked Alaska but also experimented with flavors to try and make the best one possible.</i>

10-11 AM

Topical Area Location	Name(s) of student(s)	Title and description
Design 4th floor	Niyi Owolabi, Shy Russel	<i>D.R.E.A.M.</i> <i>D.R.E.A.M. stands for Designing Resources for Empowerment and Making, these are our final deliverables for the class.</i>
	Kathryn Hite, Miriam Kome, Matthew Ruehle	<i>Spinner Games for Accessible Education</i> <i>Children with visual impairments often get left out of the engaging side of education in classrooms such as games displayed on a SmartBoard. Our goal was to create a universally accessible spinner game in partnership with Perkins School for the Blind.</i>
	Sophia Nielsen, Rowan Sharman, John Wen, Gracey Wilson	<i>Designing for Street Musicians</i> <i>We spent a semester in UOCD talking to street musicians and developing a prototype of our portable performance space. Come check out the prototype and maybe even hear us play a few songs!</i>
	Diego Alvarez, Matt Brucker, Christina Segar, Saloni Sharma	<i>Inact</i> <i>Our User Oriented Collaborative Design (UOCD) team worked with immigrant and refugee center volunteers in order to learn more about their lives and ways in which we could design something together that would be both beneficial and impactful. We've learned a lot this semester, come check out our work!</i>
Electrical Engineering 4th floor	Jeremy Ryan, Nathaniel Tan	<i>Transistor-level Hamming error correction</i> <i>Error detection and correction are fundamental to telecommunication, allowing people to reliably send data through networks and the Internet. We implemented a four-bit error correction circuit using transistor-level digital logic with over 150 CMOS transistors.</i>
	Coleman Ellis, Paige Pfenninger	<i>OSS: PCB Design</i> <i>We have spent the semester designing a weather station and a persistence of vision spinner.</i>
Math and Physics 4th floor	Chase Joyner, Tommy Weir	<i>Boats Boats Boats</i> <i>The first project in QEA was to make a boat that followed specifications, this is our boat!</i>
Student life (study away, passionate pursuit, etc). 4th floor	Sean Carter	<i>Three years of Hackathons</i> <i>For the class "Tell the Story of What You Make", I present the fascinating creations that came out of the 24 hours of madness that is the average hackathon</i>

11 AM-12 PM

Topical Area Location	Name(s) of student(s)	Title and description
Electric Vehicle Outside (Rain: AC128)	Utsav Gupta, Naomi Chiu, Kevin Crispie, Alexander Hoppe, Onur Talu, Lacie, Aurora Bunten, Sunny Shroff, Rachel Won, Andrew Schnurr, Anil Patel, Peter Seger, Walker, Hwei-Shin Harriman, Vienna Scheyer, Josh Deng, Isa Blancett, Noah Rivkin, Kian Raissian, Alex Chapman, Will Fairman	Olin Electric Motorsports <i>Come see our most advanced vehicle yet, Mk. 3, and talk to the amazing engineers behind it.</i>
Arts, Humanities and Social Science Outside (Tent) (Rain: AC326)	Bill Wong, Mackenzie Frackleton, Cecilia Diehl, Keenan Zucker, Bryan Werth, Nathan Lepore, Nina Tchirkova, Luis Zuñiga, Alison Palmer	Olin Performance Improv und Magick <i>Comedy made up on the spot: Come see us perform live theater where the plot, characters, and dialogue are made up in the moment!</i>
Robotics/ Mechatronics AC306	Anna Buchele, Chloe Grubb, Andrew Holmes, Alexander Hoppe, Audrey Lewis, Paige Pfenninger, Logan Sweet, Max Wei	Elecanisms Penny Arcade <i>Come play two fun, mechatronic arcade games created by the Elecanisms class this semester.</i> Bomb Squad: <i>Work with your team to defuse the bomb before time runs out!</i> Lunacy: <i>Based on the classic kid's game Screwball Scramble, Lunacy is an out-of-this-world marble-based obstacle course, with challenging electro-mechanical puzzles and 2 player co-op.</i>
Aerospace Engineering 1st floor	Cedric Kim, Alex Frye, Alex Scott, Jacob Regenstein	Olin Design Build Fly <i>After a year of work, our project team has successfully created a composite fixed wing aircraft, placing 11th overall out of 100 teams. Come see our design and build process for our competition plane!</i>
Bioengineering or Biology 1st floor	Cassandra Overney, Liv Kelley	Community Comparison of the Nutrient Cycling Abilities of Freshwater and Saltwater Bacterial Communities <i>We enriched a variety of stably growing marine and freshwater bacterial communities in order to extrapolate the cellulose digesting and nitrogen fixing potential of previously uncultured microbes.</i>
Computing 1st floor	Matthew Brucker, Tobias Shapinsky, Kyle Combes	InfinityBoard <i>InfinityBoard is a "virtual whiteboard" built as a real-time collaboration tool for team projects. Come learn about the future of team collaboration!</i>
Electrical Engineering and Computing 1st floor	Marie-Caroline Finke, Gabriel Butterick	Applications with DSP: Heartbeat sensor <i>After a delve into the land of digital signal processing we are applying that knowledge to identify people's heartbeats from a video. We might be able to differentiate between dog and human too!</i>
Robotics/ Mechatronics 1st floor	Isaac Vandor, Emily Kohler, Danny Wolf	Applying Structured Light Laser Imaging to Obstacle Avoidance <i>Using structured light laser imaging as a navigational sensor input for littoral (coastal) water robotic vehicles is a novel approach to navigation that has potential to improve research in shallow water areas, coastal defense, and many other applications. We will be demo-ing a working structured light laser system developed and tested through the Robotic Systems Integration class this semester.</i>
	Amy Phung, Nathan Estill, Sherrie Shen	Turtlebot Map Navigation <i>Given a map of laser scan data, we navigate a Turtlebot in simulation and in real life through from its current position to anywhere accessible on the map.</i>
Student life (study away, passionate pursuit, etc). 1st floor	Patrick Huston, Franton Lin, Scott Mackinlay	Bicycle Framebuilding <i>This semester, we've been working on building up complete custom steel bicycles from scratch. Come check out our awesome bikes!</i>
	Brandon Zhang	Cosplay! <i>I did a passionate pursuit on lesterworking + sewing for cosplay! Come take a look!</i>

11 AM-12 PM

Topical Area Location	Name(s) of student(s)	Title and description
Arts, Humanities and Social Science 3rd floor	Alison Palmer, Mark Goldwater, Micah Reid, Flynn Michael-Legg	The Body and Identity <i>We are going to be discussing the readings around the body and how it impacts identity formation. This work was done under Jonathon Adler's guidance.</i>
Computing 3rd floor	Chase Joyner	Egg World <i>A project in Software Design utilizing pygame to make a game. This is a polished version of the game.</i>
	Hwei-Shin Harriman, Cassandra Overney, Josh Deng, Enmo Ren	Paletteful <i>Generate web safe color palettes from inputted images using color theory, k means clustering, and machine learning. Our goal is to extract usefulness from your favorite images by providing user-friendly tools, such as downloadable color palettes and image sentiment analysis. We want to make it easier for everyone to be amazing designers and artists.</i>
Design 3rd floor	Daniel Alhadeff, Annie Kroo, Nate Sampo	Fort Animals <i>A design for an innovative K-9 training facility that encourages interdisciplinary connections and community engagement.</i>
	MJ McMillen	The Farmers' Market of the Future <i>The Cottage Crew UOCD team studied home bakers and artisans, and designed a product to improve farmers' markets.</i>
Education 3rd floor	Alli Busa, Emma Freedman, Athmika Senthilkumar	Circuit Fun Marble Run <i>A DREAM project designed to teach you about circuit parts with the excitement of creating a marble run track. Come design your own marble circuit!</i>
Entrepreneurship 3rd floor	Jane Sieving, Khang Vu, Kyle Emmi, Luis F. Zuniga, Madi Wyatt, Emma Pan, Braden Oh	info.olin.build <i>This is an information platform for all Oliners, by all Oliners.</i>
Mechanical Engineering 3rd floor	Cameron Wierzbanski, Katie Thai-Tang, Anya Jensen, Kyle Emmi	Agalag <i>A mechanical, arcade inspired, kinetic sculpture. Our final project for Introduction to Mechanical Prototyping class.</i>
Robotics/ Mechatronics 3rd floor	Jeremy Garcia, Maximilian Schommer	Computer Controlled Chiseling <i>Ever want to sculpt your face out of a brittle material with an industrial robot arm? Look no further, for we built an automated, computer controlled chiseling machine as well as the CAM software and mesh slicer to go with it.</i>
Computing 4th floor	Kathryn Hite, Andrew Deaver, Patrick Huston, Hieu Nguyen	12 Hour SoftDes <i>Can a group of E:Computing seniors complete every SoftDes final project in 12 hours? We found out.</i>
	Jordan Crawford-O'Banner, Hadleigh Nunes	Void Boat Odyssey 2 <i>Void Boat Odyssey 2 is a point and click adventure game that is set on an abandoned spaceship. It was made as our final SoftDes project.</i>
Design 4th floor	Melissa Anthony, Liz Leadley	Shaper Thumb Pianos <i>We're a DREAM group partnering with ADE to bring the Shaper to the mobile makerspace in rural Alabama. Come see a preview of our curriculum that uses it to make music.</i>
Entrepreneurship 4th floor	Raquel Dunoff, Libby Tawes	Fuzzy Hammocks <i>Try out our fuzzy hammock insert that will keep you warm and extend the hammocking season. This project was made for our Products and Markets class.</i>
Materials Science and Chemistry 4th floor	Alex Li, Christina Segar, Liz Leadley, Serena Chen	rRecycling Hard Drives <i>A materials science view on recycling old hard drives, including the difficulties of the process and an experimental steel alloy cast from the covers.</i>
Robotics/ Mechatronics 4th floor	Anusha Datar, Nicholas Sherman, Eric Miller, Kaitlyn Keil	Wizards' Chess <i>Real life wizards' chess! What more could you want?</i>

11 AM-12 PM

<i>Topical Area Location</i>	<i>Name(s) of student(s)</i>	<i>Title and description</i>
Student life (study away, passionate pursuit, etc). 4th floor	Paul Nadan, Nathan Sampo, Daniel Alhadeff, William Derksen	<i>EsCape</i> <i>Using your soul as a method of movement, jump, fall and teleport through our game: EsCape.</i>
	Sophia Nielsen	<i>If You're Board</i> <i>I built a long board. Come by if you'd like to see it or hear how.</i>
Sustainability 4th floor	Maya Calabria, Jillian MacGregor, Ashley Swanson, Hwei-Shin Harriman, Sarah Deng, Camille Girard	<i>Thrifter!</i> <i>We've created a clothing swapping app that allows users to trade old clothing for old clothing. Now everyone can update their wardrobe without introducing more clothing waste to the cycle!</i>

1-2 PM

Topical Area Location	Name(s) of student(s)	Title and description
Sustainability/ food-drink AC326	John Mathai	Castle Island Sustainability Initiatives <i>Posters and talk on my semester as a sustainability consultant for a local craft brewery. Note: Must be 21 years of age or older. ID required. As part of this presentation a single sample of beer will be offered.</i>
Design AC328	Alix McCabe, Brennan VandenHoek, Brett Atkinson, Cecilia Diehl, Rebecca Patterson, Alexey Andreev, Benjamin Thompson, Hassan Ahmed, Matthew Aston, Owain Davies	Collaborative Design of Autonomous Vehicles for Aging Adults <i>A cloud technology based interdisciplinary collaboration between a globally distributed team of design engineers and automotive designers, focused on developing a new automotive space for aging adults.</i>
Arts, Humanities and Social Science 1st floor	Anna Griffin	From Sheep to Sweater <i>Why buy yarn when you could make your own? This semester I learned how to spin my own from unwoven sheep fiber.</i>
	Erika Serna	Labels <i>What does it mean to leave everything behind and start anew? What does it entail when you have unlimited space to grow? Labels and there context.</i>
Computing 1st floor	Utsav Gupta, Diego Berny, Isaac Vandor	ASL Translator <i>ASL is spoken by more than 6 million people in the United States yet we lack a reliable tool that can convert ASL signs to speech in real time. This project is a step towards creating that tool; we have managed to achieve real time ASL alphabet to speech conversion and want to display it to the Olin community.</i>
	Julian Stone, Quinn Kelley, Alex Bahner	Dark Castle Game <i>Dark Castle is a 2D platforming role-playing game that utilizes AI to react to how to player played the game. We created all of the assets (graphics, music, etc) by hand to form an engaging, challenging, and fun experience.</i>
	Sam Myers	Consumables - Order food with your friends <i>A new social networking service for crowdsourcing late-night food orders and group outings on college campuses.</i>
	Mark Goldwater, Sid Garimella, and Kawin Nikomborirak	Computer-Vision-Assisted Origami <i>We utilized OpenCV to project origami instructions onto a piece of origami paper.</i>
Design 1st floor	MJ McMillen	The Farmers' Market of the Future <i>The Cottage Crew UOCD team studied home bakers and artisans, and designed a product to improve farmers' markets.</i>
Mechanical Engineering 1st floor	Shawn Albertson, Camille Girard, Leo Liu, Madi Wyatt	Apollo 18 <i>Our final Introduction to Mechanical Prototyping Project. Our windowsill sculpture captures the events of an Apollo era launch in a 12 x 12 x 6 in display.</i>
	Eamon O'Brien, Adrian Botran, David Freeman	Worms, a sculpture <i>Worms is a kinetic sculpture crafted with an emphasis on sheet metal, telling the visual tale of an adventurous space explorer.</i>
Robotics/ Mechatronics 1st floor	Cali Wierzbowski, Junwon Lee, Harrison Young	Amoebots <i>We have been working on a whole skin locomotion mechanism actuated by shape memory alloy contractile rings.</i>

1-2 PM

Topical Area Location	Name(s) of student(s)	Title and description
Arts, Humanities and Social Science 3rd floor	Emma Freedman	<i>Living Patterns</i> <i>We collect data about ourselves constantly, but can we actually draw causal conclusions from them? This installation is a vibrant, sculptural exploration of the patterns and chaos of personal mood data.</i>
	Samantha Young	<i>Telling the Story of What I Made</i> <i>This will be a collection of the visualizations I made in the class "Tell the Story of What You Make" this semester.</i>
	Jordan Crawford-O'Banner, Mika Notermann, Melissa Anthony, Lydia Hodges, Micah Reid	<i>[brand name] stickers</i> <i>We created stickers that help people express different parts of their identities. They help bring attention to both visible and invisible minorities.</i>
Computing 3rd floor	Allison Basore	<i>Spectacular Sudoku Solving with Super Sparse Signals</i> <i>A fun an easy way to understand the concepts behind sparse signal processing. By using Sudoku puzzles as sparse signals, we are able to show the steps of sparse signal processing in a way that exemplifies its potential for a variety of fields.</i>
	Bryce Mann, Maya Calabria	<i>NBA Shot Data Visualization</i> <i>We created a web integrated heat map for shot chart data from the NBA. Come see how your favorite players and teams did this season, or how shooting has changed over the course of NBA history.</i>
	Kristen Behrakis, Minju Kang	<i>Making a Debugger</i> <i>In this project, we created an interactive debugger that is integrated with a new, self-developed programming language. The debugger has a GUI and allows users to visually step through their code.</i>
Design 3rd floor	Liz Leadley	<i>Approachability Awareness Armband</i> <i>This project for Designing Resources for Empowering and Making (DREAM) displays a person's energy and approachability, offering nonverbal communication for those who need it.</i>
Materials Science 3rd floor	Aurora Buntin, Anil Patel, Mikhaela Dietch	<i>Tampons: What are You Putting in Your Body?</i> <i>Tampon manufacturers are not required to publish the contents of tampons. Thats 41 million people a year who don't know what is going inside them. In this presentation, we take a deep dive into what tampons are made of and how that effects you.</i>
Mechanical Engineering 3rd floor	Anya Jensen, Camille Girard, Kyle Bertram, Max Otoadese	<i>Kinematic Sculpture</i> <i>A moving sculpture from the class Mechanical Prototyping. Made in part from folded sheet metal, molded carbon fiber, and 3D printed parts.</i>

Thank you for being part of Olin Expo Spring 2018!