

Engineering @McLennan

Volume 5

www.mclennan.edu/engr

Fall 2017



What's Happening

This was quite an eventful year in engineering! We sent students across the country and across an ocean. The Engineering & Physics Club hosted the ExtraLife fundraiser again, raising over \$1000 for Children's Miracle Network, and we were proud to offer Mechanics of Materials for the first time in the spring. Students got to go beyond Statics, studying stress and strain, and really paying attention to those units! We also signed new transfer agreements and strengthened old ones. Our students found summer research positions across the country, including in the MedIX program at DePaul University in Chicago. We also welcomed a new mini-member of the engineering program in October, when Professor Sidwell and her husband Ben brought Lucas into their family.



Engineering Abroad

This year, we embarked upon our first engineering-only trip, traveling to the United Kingdom. We began with a "surprise graduation" on the London Eye for students, complete with caps and gowns. Our London adventures included engineering tours of the Underground and Tower Bridge, as well as an economic case study on the revitalization of Olympic Park. We also enjoyed a few rain-soaked walking tours and an impromptu lecture by Prof. D on how engines work at the Rolls Royce museum before heading to Bath. After trekking around Stonehenge, we headed up to Scotland. Our adventures ended with a journey to the River Forth, where we enjoyed the view of three different bridges built in three different centuries! Once again, our students developed a travel guide, *When Nerds Travel in Packs: London, Bath, and Edinburgh: A travel guide for engineers and those who love them* (Volume 2), which is available on Amazon (<http://a.co/fGZ7bid>).



BAYLOR
UNIVERSITY

New Baylor Transfer Agreement

We now have an official articulation agreement in place between Baylor University's School of Engineering and Computer Science and MCC's engineering program. This agreement will help students transfer from MCC to Baylor, where students can ultimately graduate with degrees in Computer, Electrical, Mechanical, or General Engineering. This agreement removes all uncertainty from the transfer process. Students seeking to attend Baylor are now given a clear pathway, allowing for a smooth transition, which will therefore help students make the most out of their time spent pursuing an engineering degree. To successfully transfer to Baylor, students must earn a "B" or higher in MCC's engineering and math courses and have a 3.25 cumulative GPA. For more information about MCC's engineering program, contact engr@mclennan.edu or 254-299-8130. For information about Baylor's engineering program, contact Dr. Dennis O'Neal at Dennis_ONeal@baylor.edu.



MARS 101

For the fourth consecutive year, the Lonestar Highlanders spent a week in April at the Mars Desert Research Station (MDRS). The crew, composed of six students (including four engineering students) and two faculty members, lived in simulation for a week, conducting research and working as a team on the "red planet." This year's projects included a continuation of a rover first developed last year, an electricity-generating bike, and an electronic device using an FPGA time down counter for the decompression chamber in the hab. The crew had a very special guest during its rotation: Rae Bichell, a science editor with NPR, who spent the day in simulation with the crew in order to learn more about our MCC's Mars 101 program. The story of our crew's experience at MDRS was featured in All Things Considered in a piece by the name "To Prepare For Mars Settlement, Simulated Missions Explore Utah's Desert", which is available on www.npr.org



Where Are They Now?

Mark Berry (CE, UT Arlington, 2015; MS in CE, UT Arlington, 2017) is working for the Louisiana Department of Transportation & Development with plans to start a Ph.D. to study hydrodynamics and riverine, and coastal environments and developing hydraulic 2D/3D models for Louisiana river systems.

Zak Fyke (CS, Texas Tech, 2017) has started his MS in Computer Science at Tech, with plans to eventually pursue a Ph.D. He loves his job in software development at FAST, Inc. and looks forward to starting his thesis!

James Grisham (Ph.D. in AE, UT Arlington, 2017) just defended his dissertation, Numerical and Analytical Study of Curvature Effects in Laminar Shock Wave/Boundary Layer Interactions, and has moved to Seattle for a new job at Blue Origin. Congratulations!

Colin Mocek (AE, Texas A&M, 2016) is working for Textron Aviation in Wichita, Kansas as a flight tester.

Michael Monell (ME, Texas Tech, 2016) is working near Denton as a design engineer for Peterbilt Motors Company, working on a new truck project that will be in full production by the end of 2020.

Luis Munoz (ME, Texas Tech, 2017) graduated magna cum laude and recently accepted a position working at the Lion Oil refinery in El Dorado, AR, as an engineer with the Turnaround Team for Delek US.

Bao Pham (IE, UT Arlington, 2017) landed an awesome job, but in his own fantasy world still wanders the earth, searching for Sasquatch and weaving his own tapestry of life.

Austin Price (PE, Texas Tech, 2016; MBA, Texas Tech, 2017) just started as a District Representative with Nalco Champion, the largest chemical provider for water, upstream, midstream, and downstream applications. He loves the mix of engineering and business. He and his new wife spend their free time house hunting

and fostering dogs.

Victor Trujillo (EE, Texas A&M, 2016) graduated in December and is looking into graduate school.

James Veselka (BAEN, Texas A&M, 2016) is living the dream working as a civil engineer-in-training and studying for the FE. He works for an engineering firm that focuses on energy, infrastructure, and environmental applications called TRC in Arlington.

Eskindir Abebe (EE, Texas Tech) is recently married and enjoys commiserating with his former MCC classmates over autonomous robots.

Jonathan Beechner (CS, Texas A&M) interned this summer at Deep Down, Inc. in Houston, building an AUV to map the ocean floor and locate chemical sources. He particularly enjoyed learning how to communicate with the rotary actuators by sending signals over a serial port, 'cuz Beechner is cool like that.

Daniel Bullard (ChemE, Texas A&M) just completed an internship with TxDOT and has plans to co-op with GAF Materials Corporation in Ennis in the spring.

Keith Geisler (ME, Texas Tech 2016) is recently married and working in Houston for the petrochemical company LyondellBasell as a reliability engineer.

Jaxom Hartman (EE, Texas Tech) was selected for the Fall 2017 Next Generation Fiber Optic Sensing System Development Internship at Armstrong Flight Research Center.

Sam Lawrence is currently a Senior Design Manager at an architectural firm in Plano called Cross Architects.

Josh MacFie (EE, Texas Tech) has started a new job at Group National Institute for Renewable Energy designing the load circuitry and balancing the load for a three-phase inverter system (for which he is already showing off his mad MATLAB skillz). He and his wife welcomed a new baby boy in April. We are so excited for them!

Eric McLean (ME, Texas Tech) enjoyed his systems and vibrations class this year. Who wouldn't, since it's the best of both worlds:

Dynamics and Differential Equations?!

Jim Rogers, our favorite toy sculptor, started a new injection molding business, first doing short-run and on-demand production, and expanding into producing model cars with the help of a stereolithography printer. He credits the SolidWorks class he took with Professor Sidwell at MCC to helping him break into this specialty industry!

Karen Rucker (EE, Texas Tech) spent the summer interning for the smallsat startup HawkEye 360 in Herndon, VA, as a result of winning a prestigious Brooke Owens Fellowship.

Ragan Forrest (ME, St. Mary's)

Audrey Giesler (CE, Texas Tech)

Alex Jirovsky (EE, Texas Tech)

Caleb Li (EE, Baylor)

Liana Martinez (IMM, Tarleton)

Garrett Rolf (ME, Texas Tech)

Eric Rovelo (Math, Baylor)

Robert Scanlon (EE, Mary Hardin-Baylor)

Wariebi Suobo (ME, Louisiana Tech)

Marcus Wauson (ME, Texas Tech)

Kaley Wiley (CE, Texas Tech)

DP Yadav (CompE, Texas Tech)

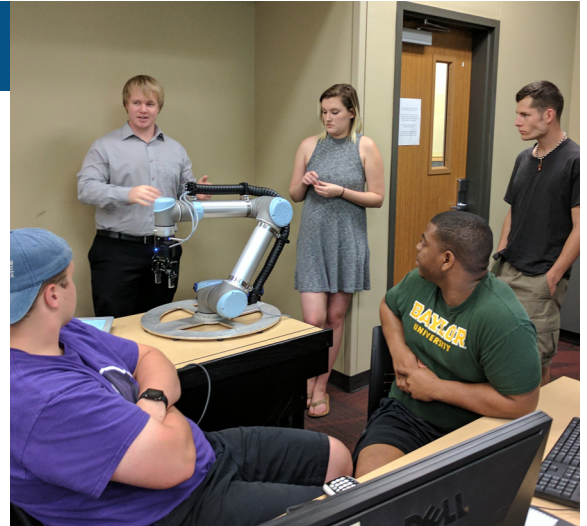
Josh Young (EE, Baylor)

Key

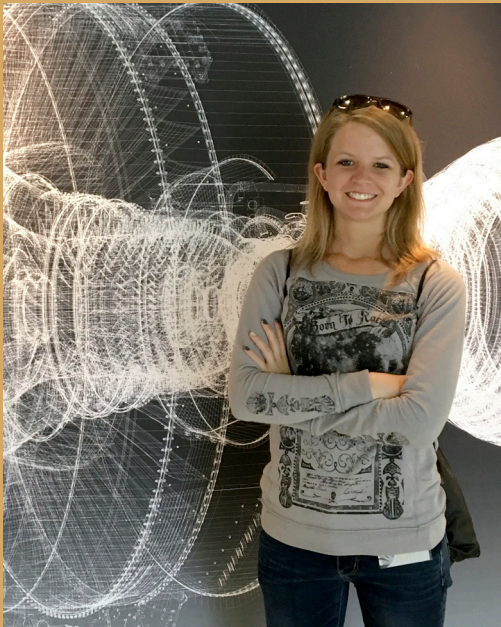
AE	Aerospace Engineering
BAEN	Biological and Agricultural Engineering
CE	Civil Engineering
ChemE	Chemical Engineering
CompE	Computer Engineering
CS	Computer Science
EE	Electrical Engineering
IMM	Industrial and Manufacturing Management
MBA	Masters of Business Administration
ME	Mechanical Engineering
MS	Master of Science
PE	Petroleum Engineering
Ph.D.	Doctor of Philosophy

Alumni Spotlight

Cody James is an Applications Engineer at Olympus Controls with plans to move into a Robot Sales Specialist position in January. His work keeps him busy with system design and integration, providing on-site support for motors, drives, controllers, machine vision, HMIs, and best of all, working with robots! Cody stopped by the programming lab at MCC a few months ago to demo how robots are used in real-world applications. Cody's advice to current MCC students: "Don't be afraid to take on projects that require you to learn new things. So you don't know how to solder, how to program in C#, or how to produce drawings in SolidWorks? Take on a project that will force you to learn. The lines between all engineering fields are becoming more blurred, and we need engineers that have skills in many different areas."



Student Spotlight



MCC hosts a yearly Engineering Career Mixer, providing students the opportunity to hear what employers are looking for in graduates. Audrey Giesler, a civil engineering student, was in her first semester at MCC when she attended the mixer. Unsurprisingly to those who know her, she immediately got a callback. "I was looking into what a job fair might be like in the future, but I walked out with an interview date," Audrey said. Audrey was hired by the City of Waco the following summer for a temporary internship position. Due to that experience, she was offered a part-time position with the Public Works' design team. "I was ecstatic to work in design. There was never a slow day – meeting deadlines, spearheading new projects, and working with contractors to troubleshoot in-field were a few of the responsibilities," Audrey said. Having graduated last spring during MCC's study abroad trip to the United Kingdom, Audrey moved on to attend Texas Tech, but she encourages others to put themselves out there like she did. "I was uncertain about attending the mixer, but that one step in the right direction has made me one of the most marketable upperclassmen at my current university." We wish her the best of luck at Tech!

Scholarship Opportunities

McLennan Engineering continues to offer merit-based scholarships to students planning on completing their engineering degree at MCC. If you have a 3.0 GPA or higher in high school math and science courses and can complete the program within two years, you may be eligible for up to \$2500 per year to pursue your studies at MCC! For more information, email engr@mclennan.edu.

McLennan Community College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities.

The following person has been designated to handle inquiries regarding the nondiscrimination policies:

Drew Canham, Vice President of Student Success, 1400 College Drive, 254-299-8645, titleix@mclennan.edu.

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