JULIA LANIER

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EDUCATION

The University of Michigan   **Ann Arbor, MI**
PhD in Computer Science and Engineering | College of Engineering   *Present*
- Research focus in security and privacy with Dr. Kevin Fu

The University of Alabama   **Tuscaloosa, AL**
Bachelor of Science in Electrical Engineering | College of Engineering   *May 2019*
- Honors College, GPA: 3.87 / 4.00
- Computer Engineering Concentration, Computer Science Minor, Mathematics Minor

PUBLICATIONS

An Initial Implementation of a Direct Digital Synthesizer Module for Radar Applications   *2018*

EXPERIENCE & PROJECTS

The University of Alabama   **Tuscaloosa, AL**
Undergraduate Researcher | ECE Department   *August 2017-January 2018*
- Developed software to create an autonomous kayak for ocean monitoring
- Worked in a Linux environment using C in the terminal
- Tested the kayak at various stages of development for naval capabilities in Lake Tuscaloosa
- Coordinated with the mechanical team to integrate the hardware and software as well as ensure functionality

Revere Control Systems   **Birmingham, AL**
Co-op Engineering Student   *August 2016 – May 2018 (3 Terms)*
- Designed, built, and tested instrumentation and control systems including communications, SCADA, and motor protection and control for municipal, OEM, and industrial applications
- Designed circuits based off network diagrams and process and instrumentation diagrams
- Troubleshot and programmed PLCs and HMIs using C and ladder logic
- Provided on-site startup and service
- Ensured compliance with costumer and government regulations such as UL and CSA certifications, NEC and IEC standards, and EU directives
- Prepared panels for witness factory acceptance tests
- Created a network cabinet and routed ethernet and fiber cables to local offices

LEADERSHIP AND MEMBERSHIP

- **Tau Beta Pi Engineering Honor Society**   *2018 - 2019*
- **Eta Kappa Nu Honor Society of Electrical and Computer Engineering**   *2016 - 2019*
President, Web Officer
- **EcoCar 3 Electrical Subteam**   *2016 - 2017*
- **Society of Women Engineers**   *2015 - 2019*
Newsletter Committee Head
- **Alpha Kappa Psi Professional Business Fraternity**   *2015 - 2018*
Executive Committee Secretary, Secretary Chair, Judiciary Committee Justice, Recruitment Team
- **Institute of Electrical and Electronics Engineers**   *2014 - 2019*
- **Alpha Delta Pi**   *2014 - 2018*
Finance Vice President, Finance Assistant, Homecoming Committee

HONORS AND AWARDS

Eta Kappa Nu Outstanding Senior Award   *2017 - 2018*
Fred R. Maxwell Jr. Award   *2016 - 2017*
Collegiate Scholarship   *May 2014*
Dean's Engineering Excellence Scholarship   *May 2014*

SKILLS AND CERTIFICATIONS

Languages **-** Proficient in C, Experience in C++, VHDL, Verilog, MIPS Assembly, PIC Assembly, Java
Software – RSLogix, Rockwell Automation Software, LTSpice, PSpice, MPLAB, Quartus, ModelSim
Forklift Operation Certification   *June 17, 2017*
CPR Certification   *December 1, 2016*
OSHA Certification   *August 19, 2016*
Basic IRS Certification   *January 26, 2016*