

Julia Lanier

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EDUCATION

UNIVERSITY OF MICHIGAN

PHD IN COMPUTER SCIENCE

AND ENGINEERING

Present | Ann Arbor, MI

Advisor: Dr. Kevin Fu

Lab: SPQR

GPA: 3.95 / 4.00

UNIVERSITY OF ALABAMA

BS IN ELECTRICAL ENGINEERING

May 2019 | Tuscaloosa, AL

College of Engineering, Honors College

Concentration: Computer Engineering

Minor: Computer Science, Mathematics

Magna Cum Laude

GPA: 3.87 / 4.00

LINKS

Github:// [JuliaKay23](#)

LinkedIn:// [julialanier](#)

Twitter:// [@juliakaylanier](#)

COURSEWORK

GRADUATE

Adv Topics in Computer Architecture

Artificial Intelligence Foundations

UNDERGRADUATE

Computer Architecture

Data Structures and Algorithms

Digital Logic

Digital Systems Design

Electric Networks

Electronics I & II

Embedded Systems

Microcomputers

Signals and Systems

SKILLS

LANGUAGES

C • C++ • VHDL

Verilog • Assembly

CERTIFICATIONS

Forklift Operation • June 17, 2017

CPR • December 1, 2016

OSHA • August 19, 2016

Basic IRS • January 26, 2016

EXPERIENCE

REVERE CONTROL SYSTEMS | CO-OP ENGINEERING STUDENT

August 2016 - May 2018 (3 Terms) | Birmingham, AL

- 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
- Troubleshoot and programmed PLCs and HMIs using C and ladder logic
- Provided on-site startup and service
- Ensured compliance with customer 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

RESEARCH

SPQR LAB | GRADUATE STUDENT RESEARCHER ASSISTANT

August 2019 - Current | Ann Arbor, MI

Currently working with Dr. Kevin Fu in embedded systems security and privacy.

REMOTE SENSING CENTER | UNDERGRADUATE RESEARCHER

November 2018 - March 2019 | Tuscaloosa, AL

Worked with Dr. Drew Taylor and Dr. Stephen Yan to design and implement a direct digital synthesizer module for radar applications.

AUTONOMOUS KAYAK PROJECT | UNDERGRADUATE RESEARCHER

August 2017 - January 2018 | Tuscaloosa, AL

Worked on a team advised by Dr. Aijun Song to develop ocean monitoring software for an autonomous kayak.

AWARDS

2017-2018 1 of 20 Eta Kappa Nu Outstanding Senior Award

2016-2017 1 of 100 Fred R. Maxwell Jr. Award

LEADERSHIP & MEMBERSHIP

2018-2019 Tau Beta Pi Engineering Honor Society

2016-2019 Eta Kappa Nu Honor Society of Electrical and Computer Engineers
President • Web Officer

2016-2017 EcoCar 3 Electrical Subteam

2015-2019 Society of Women Engineers

Newsletter Committee Head

2015-2018 Alpha Kappa Psi Professional Business Fraternity

Executive Board Secretary • Judiciary Committee Justice • Recruitment Team

2014-2019 Institute of Electrical and Electronics Engineers

2014-2018 Alpha Delta Pi

Finance Vice President • Finance Assistant • Homecoming Committee

PUBLICATIONS

J. Lanier, D. Taylor, and S. Yan. An Initial Implementation of a Direct Digital Synthesizer Module for Radar Applications. In *SoutheastCon 2019*. In press.