

Julia Lanier

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EDUCATION

UNIVERSITY OF MICHIGAN MS & PHD IN COMPUTER SCIENCE AND ENGINEERING

Present | Ann Arbor, MI
PhD Advisor: Dr. Kevin Fu
Lab: SPQR
MS 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
GPA: 3.87 / 4.00
Magna Cum Laude

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

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.

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

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

[1] J. Lanier, R. A. Taylor, and J. Yan. An initial implementation of a direct digital synthesizer module for radar applications. In *2019 SoutheastCon*, pages 1–2, April 2019.