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: 3.90 / 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
Adv Operating Systems

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++ • Python
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 collaboration with Dr. Alanson Sample on an Ultrasonic Microphone Array project.

SKEPTRE | Adv Operating Systems Semester Project
January 2020 - April 2020 | Ann Arbor, MI
Profiled the success of the hardware attack, Spectre, when various amounts and types of "processor noise" was added to the victim CPU.

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
- Troubleshot and programmed PLCs and HMIs using C and ladder logic

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.