# **Nicolas Mitchell**

University of Louisville | JB Speed School of Engineering

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#### **EDUCATION**

## **Bachelor of Science in Computer Engineering/Computer Science**

Expected May 2020

GPA 3.354/4.0

J.B. Speed School of Engineering, University of Louisville, Louisville, Kentucky

Hours Completed: 128

# LANGUAGES/TECHNOLOGIES

- Languages: C, C++, Java, Python, Golang
- Assembly and embedded systems programming using microcontrollers
- Experience with RESTful **APIs**

- Containerization with Docker
- GNU/Linux environment, including GCC, Bash, and Ubuntu
- SQL and NoSQL databases

APPLIED EXPERIENCE Hardware: Designed and assembled a gaming computer from scratch, used an Arduino to interact with electrical systems such as an LED screen and vehicle ECU, designed and built a self-orienting solar panel using an ATMega328P Microcontroller and stepper motor

> Go: Worked on a backend application and RESTful API that processed HTTP requests to schedule AWS tasks and interact with databases, built a computer vision parking spot detector for a hackathon using darknet

> C/C++: Used for Data Structures assignments, Embedded systems projects, Arduino programming, and Operating Systems class projects

> Python: Used in conjunction with TensorFlow to create image recognition software as part of a hackathon, built an automated phishing email response system using NLU, NLP, and text generation

## **WORK EXPERIENCE**

# **Visiting Research Assistant**

January 2019-May 2019

University of Southern California Information Sciences Institute

Waltham, MA

- Researched and developed a system component for a DARPA funded project to automatically detect and respond to phishing emails
- Worked with a team to develop new features and fix bugs for a Natural Language Processing library

# **Software Developer Intern**

January 2018-April 2018

El Toro

Louisville, KY

- · Wrote software in Go to interact with and test various databases including MongoDB, Aerospike, and PostgreSQL
- Wrote a RESTful API with Golang to handle and process requests using Amazon Web Services
- Used Docker containers to control and automate tests

#### **Student Tutor**

August 2017-December 2018

Resources for Academic Achievement (REACH) Computer Resource Center

Louisville,KY

Tutored for Computer Information Systems and Computer Engineering classes

## **ACTIVITIES/HONORS**

# **Electronics Team Member, Formula SAE**

January 2018-Present

- Designed LED screen to show vehicle RPMs using an Arduino
- Wrote code to control gear shifting and tracking of speed and RPM from the ECU

Hackathons: FirstBuild 2017, VandyHacks 2017, DerbyHacks 2018, FirstBuild 2018

**VP of Finance and Loss Prevention**, *Delta Upsilon Fraternity* 

January 2018-Present

- Prepared the budget, tracked expenses, and handled collection of dues
- Ensured the chapter suite was kept clean and rules were followed during social events

**VP of Associate Member Education**, Delta Upsilon Fraternity

April 2017-November 2017