

NICOLAS MITCHELL

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10704 Sunderland Road, Louisville, KY 40243

Education

Bachelor of Science in Computer Science and Engineering

JB Speed School of Engineering, University of Louisville

GPA: 3.341/4.0

May 2020
Louisville, KY, USA

Skills

Languages: C, C++, Java, Python, Golang, JavaScript, Bash

Other technologies: AWS, Docker, Git, GNU/Linux, SQL and NoSQL databases, ReactJS

Fields of Expertise: Backend Programming, serverless architecture, cloud infrastructure, front-end development, networking

Work Experience

Backend Software Developer Intern

June 2019-August 2019

Red Ventures

Fort Mill, SC

- Developed backend microservices in Golang for an internal data pipeline software
- Developed integration with third party service providers like Segment
- Built web UI components using ReactJS
- Wrote MySQL database migrations to facilitate software functionality

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 written in Python

Software Developer Intern

January 2018-April 2018

El Toro

Louisville, KY

- Wrote automated unit and integration tests for database software in Go
- Wrote software in Go to interact with various databases including MongoDB, Aerospike, and PostgreSQL
- Wrote an outward-facing 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-Present

Resources for Academic Achievement (REACH)

Louisville, KY

- Helped students and staff with IT issues
- Tutored for Computer Information Systems and Computer Engineering classes
- Helped students solve problems with Microsoft applications, Python, C, C++, C#, and Java

Applied Experience

Embedded Systems: Used an Arduino to interact with electrical systems such as an LED screen and vehicle ECU, designed and developed a self-orienting solar panel using an ATmega328P Microcontroller, designed and developed a touch-sensor game using a Raspberry Pi.

IOT/Serverless: Architected, developed, and deployed an IOT pilot project that ran sensor data through AWS IoT to an Aurora Serverless database cluster using a lambda function.

Networking/Architecture: An Aurora Serverless Database Cluster was stored in a private subnet of a VPC. An EC2 API was placed in a public subnet of the same VPC, and served database data to authorized users through a web client hosted in S3. Wrote all code for the database, API, and frontend client.

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

Certifications

AWS Certified Solutions Architect – Associate

July 2019- July 2022