NICOLAS MITCHELL

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10704 Sunderland Road, Louisville, KY 40243

EDUCATION

**Bachelor of Science in Computer Science and Engineering** May 2020

*JB Speed School of Engineering, University of Louisville* **GPA:** 3.341/4.0

SKILLS

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

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

**Fields of Expertise:** Backend development, cloud infrastructure, networking, containers, concurrency

WORK EXPERIENCE

**SAP Next Talent Rotational Developer** September 2020-Present

*SAP* Remote/Palo Alto, CA

* Reduced the need for manual task execution by working on a team to architect and build an automated workflow scheduler
* Simplified deployment by automating container building, pushing, and running using Ansible
* Improved automated processes for server deployment and setup scripts

**Backend Software Developer Intern** June 2019-August 2019

*Red Ventures* Fort Mill, SC

* Developed backend micro-services in Golang for an internal data pipeline software
* Allowed for data connections between third party data providers like Segment and internal data pipeline by building Golang plugins
* Improved UX and integrated new backend components to web frontend with ReactJS
* Facilitated new software features in a MySQL database by writing migrations

**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
* Developed new features and fixed bugs for a Python natural language processing framework

**Software Developer Intern** January 2018-April 2018

*El Toro* Louisville, KY

* Improved test coverage to 100% by adding necessary unit and integration tests in Golang
* Facilitated integrations for various databases including MongoDB, Aerospike, and PostgreSQL by creating and implementing a common interface
* Wrote a public REST API with Golang to handle, process, and schedule tasks using AWS
* Sped up internal CSV data ingestion program by over 1000% by implementing concurrent line processing using goroutines in a worker pool

**Student Tutor** August 2017-April 2020

*Resources for Academic Achievement (REACH)* Louisville,KY

* + - * Tutored students in Python, C, C++, Data Structures and Algorithms, and other CS topics

APPLIED EXPERIENCE

**Embedded Systems:** Interfaced and displayed vehicle ECU data with an Arduino and LED screen, built a self-orienting solar panel using an Atmel microcontroller, built a touch-sensor game on a Raspberry Pi.

**IoT/Serverless:** Designed, 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:** Managed microservices in an AWS VPC separated into public and private subnets. Included components were a database, web api, and web client. Integrated web api and client with Auth0 SSO.

**Open Source Contributions**: Godot Game Engine, Kubernetes, Istio

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

CERTIFICATIONS

**AWS Certified Solutions Architect – Associate** July 2019- July 2022