NICOLAS MITCHELL

https://nico-mitchell.com
namitc02@louisville.edu
(502)649-8340

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

Programming Languages: Golang, Python, C, C++, Bash, Javascript, Java
Other technologies: AWS, Docker, Git, Linux, SQL and NoSQL databases, ReactJS, Ansible, Kubernetes
Fields of Expertise: Backend development, cloud infrastructure, networking, containers, concurrency, APIs

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
- Secured workflow scheduler data by implementing an authentication server that used an existing LDAP deployment to provide signed JSON web tokens
- 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 using machine learning
- 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 data ingestion tool by over 1000% by implementing a concurrent worker pool

Student Tutor   August 2017-April 2020
University of Louisville 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. Used token-based authentication to limit access to resources by owners using OAuth through Auth0.
Open Source Contributions: Godot Game Engine, Kubernetes, Istio

CERTIFICATIONS

AWS Certified Solutions Architect – Associate   July 2019- July 2022