NicolasMitchell

**About Me**

**Nicolas Mitchell** is a software engineer who focuses on networking, automation, dev-ops, and distributed system design. When he’s not working, he can be found in the climbing gym, playing video games, and contributing to open-source projects. Nico speaks English, Spanish, and Portuguese.

**Skills**

**Areas of Expertise:** Backend development, cloud infrastructure, networking, containers, concurrency, distributed systems, automation

**Programming and Scripting Languages:**

C, JavaScript, Go, C++, Bash, Java, Python, Rust

**Other Technologies:** AWS, Docker, Ansible, Linux, SQL Databases, NOSQL Databases, React, Git, Kubernetes, Splunk

**Open-Source Contributions**

Godot Engine

Zellij

Istio

**Hackathons**

FirstBuild Hack the Home 2017, 2018

VandyHacks 2017

DerbyHacks 2018

**Hobbies and Talents**

**Spoken Languages:** English (fluent), Spanish (fluent), Portuguese (intermediate)

**Music**: Guitar (12 years), Singing (in a band), production (making beats with friends)

**Fitness**: Indoor rock climbing (bouldering), weightlifting

1233 Levin Ave, Mountain View, CA 94040

(502)649-8340

[nicomitchell502@gmail.com](mailto:nicomitchell502@gmail.com)

<https://nico-mitchell.com>

Education

Bachelor of Science – Computer Science and Engineering May 2020

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

Work Experience

Software Engineer – Observability September 2020 – Present

*SAP* Palo Alto, CA

* Reduced the need for manual task execution by working on a team to architect and build an automated workflow scheduler
* Improved automated processes for server deployment and setup scripts
* Created visibility into critical production systems by building Splunk dashboards
* Ensured production deployment processes could be verified by writing deployment tests
* Simplified deployment by automating container building, pushing, and running using Ansible

Software Engineering Intern – Data Platform June 2019 – August 2019

*Red Ventures* Fort Mill, SC

* Developed backend micro-services in Golang for an internal data pipeline software
* Facilitated new software features by writing SQL database migrations
* 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

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

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

Student Tutor August 2017 – April 2020

*University of Louisville Resources for Academic Achievement* 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.

Distributed Systems: Developed networked chat room in Golang using a custom TCP protocol, deployed on AWS Elastic Containers. Developed naïve implementation of a gossip protocol deployed on a network of docker containers.