JOY KIPROTICH

LinkedIn | GitHub | Personal Website | kiprotichjoychepkemboi@gmail.com

EDUCATION

The University of Texas at San Antonio
San Antonio, TX

Bachelor of Science in Computer Science
Grad date: **May 2023** | *GPA:* **3.91**

Northern Virginia Community College
Alexandria, VA

Associate of Science in Computer Science
Grad date: **August 2020** | *GPA:* **4.0**

WORK EXPERIENCE

PagerDuty
September 2022-December 2022

Software Engineer Intern

- 1 of 4 team members on the Runbook automation Infrastructure team that built and maintained Runbook Automation (RBA) Features on Amazon Web Services
- With RBA being a cloud service, I was able to set up a local cluster using Kubernetes in Docker (Kind) that was able to spin up a local instance of RBA and leveraged Kind features to enable RBA deployment ingress in the cluster to work.
- Replaced cloud specific dependencies that is AWS Relational Database with MySQL and Amazon S3 with MinIO thus our local RBA instance was able to fully mimic RBA functionality on the cloud.
- Finally automated the whole setup process with a single script and the local instance significantly improved the team's testing efforts since previously all testing was done in a sandbox environment only.
- Wrote various terraform code to make changes to our RBA EKS cluster, that is, RDS, route 53 DNS and AWS secret manager.

BlackRock
June 2022-August 2022

Summer Analyst

- 1 of 4 interns that joined the Aladdin Product Group - Alternatives team
- Created an internal messaging system that enabled real-time transfer of data between Aladdin applications and eFront, its acquired company, by use of Kafka and implemented a retry mechanism in case of failure during retrieval.
- Data was now able to be processed faster since it is sent as a constant stream and memory overload issues were significantly reduced.
- Worked on documentation of the project to ensure that work could be scaled by team members in future.

Zendesk
September 2021-May 2022

Software Engineer Co-op

- Was part of the ZNOC team that respond to incidents and build tools to support reliability work at Zendesk
- 1 of 6 backend team members that worked on building an internal application that improves observability, and connects Zendesk's many tools into one common UI
- Specifically tasked with migrating calculations and different functionality that were initially being done on the frontend via GraphQl to the backend effectively improving runtime and allowing the frontend team to maximize GraphQl utility
- Retrieved massive alerting data from PagerDuty platform and worked to make it queryable further improving observability and incident response efforts by having a constant stream of incident data easily accessible through our internal application.

The University of Texas at San Antonio
May 2021-August 2021

Undergraduate Research Assistant (Robotics)

- Design, programming, data analysis, and data visualization of robot swarms with the aim of improving their foraging algorithm.
- Specifically worked with Central Place Foraging Algorithm to reduce inter-robot collisions and reduce collection time.
- Work done on Ubuntu under ARGoS simulator with code in C and Python.

PROJECTS

YouTube to Spotify | Program that automates transfer of a YouTube playlist to a newly created Spotify Playlist. (Python)

Billboard Web Scraper | Program that gets data from Billboard and generates desired Chart placements depending on user input (Python)