

Kara Dietz

UNIVERSITY OF WATERLOO | SOFTWARE ENGINEERING

☎ +1 (519) 498-3982 | ✉ kmdietz@uwaterloo.ca | 🏠 karadietz.me | 🌐 karadietz | in kara-dietz

SKILLS

Languages Java • Python • Go • C • C++ • Ruby • Bash • Swift • SQL

Tools & Frameworks AWS • GCP • Kafka • Docker • Kubernetes • Flask • Rails • GraphQL • Jenkins • Maven • Git

WORK EXPERIENCE

Shopify

Sept. 2020 - Dec. 2020

PRODUCTION ENGINEER INTERN

- Spearheaded the automation of scaling **Kafka** topics which eliminated misinformed partition counts, saving **hours per week** for developers and optimizing resource usage by **> 200%** and ultimately reducing incidents
- Designed Python package and deployed using a **Docker image** and **Kubernetes CronJob**, building the foundation for automated infrastructure maintenance to enable time to be spent on new projects
- Contributed to Kafka streaming platform which supports thousands of **TB/s** of seamless data transfer
- Enhanced **Go** and **Ruby** wrappers to **accelerate incident management** and minimize client-side code

Capital One

Jan. 2020 - Apr. 2020

SOFTWARE ENGINEER INTERN

- Created **Kafka**, **AWS Lambda**, and **AWS Kinesis** serverless pipelines to detect patterns and notify customers in real-time of potential fraudulent activity or offer insights for managing their account
- Added integration testing platform to real-time pipeline deployment process, eliminating the need for 1-5 day production change approvals by surpassing quality thresholds, and enabling fully continuous development
- Built **AWS Lambda layers** with **Java** to streamline pipelines, accelerating iteration and increased scalability
- Led data analysis using **Apache Spark**, **Python**, and **SQL** to validate results stored in **Amazon S3** buckets

OpenText

May 2019 - Aug. 2019

SOFTWARE DEVELOPER INTERN

- Designed, developed, and tested debugging tool using **Python** and **SQL** to automate the categorization of test failures, and display data on a new webpage, saving 4 hours per week
- **Automated UI tests** on a customer communication management application using local **VMs** via **Jenkins**, ensuring precise tests and increasing runtime by more than 5x
- Quickly learned new skills and worked efficiently, leading me to finish project 1 month earlier than expected

PROJECTS AND RELEVANT EXPERIENCE

Daily Chess Pro | [Python](#), [Flask](#), [GCP](#), [Facebook Messenger API](#)

HACK THE NORTH 2020++

- Created a Facebook Messenger bot which sends subscribed users daily chess puzzles
- Leveraged **GCP's App Engine** to host **Flask API** which handles Facebook Messenger webhooks
- Utilized **Cronjobs** to schedule repeated jobs, and stored subscribed user information in a **MySQL** database

Ballerinify iOS app | [Swift](#), [Xcode](#), [TensorFlow](#)

- Developed an **iOS app** using **Swift**, **AVFoundation**, and **UIKit** which uses the camera to watch a person in real-time and accurately identify the dance position that the user is in
- Employed the **Tensorflow Posenet** machine learning model to map key points on a person's body

EDUCATION

University of Waterloo

Sept. 2018 - Apr. 2023

CANDIDATE FOR BACHELOR OF SOFTWARE ENGINEERING WITH A DIPLOMA IN SUSTAINABILITY

- Term Dean's Honour List | GPA: 3.9
- Relevant Course Work: Algorithms, Data Structures and Data Management, Database Management, Software Engineering Principles, Software Testing and QA, Operating Systems