

# Kara Dietz

SOFTWARE ENGINEERING | UNIVERSITY OF WATERLOO

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## SKILLS

**Languages** Java • Python • C • C++ • Swift • SQL • HTML • CSS

**Tools & Frameworks** Git • AWS • Kafka • Jenkins • TensorFlow • Terraform • Maven • Bootstrap • Vim • Jira

## WORK EXPERIENCE

### Capital One

Jan. 2020 - Apr. 2020

SOFTWARE ENGINEERING 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 helpful 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** using **Java** and **Maven** to streamline all real-time pipelines, leading to faster iteration and greatly enhancing scalability
- Conducted data analysis using **Apache Spark**, **Python**, and **SQL** to validate results stored in **AWS 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
- Migrated repository of 100+ tests from Visual Basic to Python, increasing code coverage and fixing bugs
- Quickly learned to navigate internal tools, leading me to finish project 1 month earlier than expected

## PROJECTS AND RELEVANT EXPERIENCE

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

Apr. 2020 - May 2020

- Developing an **iOS app** using **Swift**, **UIKit**, and **AVFoundation** 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
- Currently finalizing the app to put on the App Store

### MindfulMe | [JavaScript](#), [HTML](#), [CSS](#), [Bootstrap](#)

Jan. 2019

STARTERHACKS

- Developed web app using **Bootstrap**, **JavaScript**, and **HTML** which takes users through a series of questions to track their mental health and generate a report to be shared with professionals
- Implemented an **API** to retrieve and display randomized images of dogs for stress relief
- Includes a live chat for users to instantly reach out to someone when they are in distress

### Cha-Ching | [Python](#), [Matplotlib](#), [NumPy](#), [Pandas](#), [TD API](#)

Sept. 2019

HACK THE NORTH

- Developed tool for students using the **ARIMA machine learning model** to predict financial stability
- Utilized data from the **TD Da Vinci API** to analyze past transactions and account balances, extend trends, and display them on a graph
- Categorizes transactions to give recommendations of areas to reduce spending

## EDUCATION

### University of Waterloo

Sept. 2018 - April 2023

CANDIDATE FOR BACHELOR OF SOFTWARE ENGINEERING WITH A DIPLOMA IN SUSTAINABILITY

- Term Dean's Honour List | GPA: 3.83