# Miranda Chan

J (236) 867-1850 | ■ mirandachanct@gmail.com | in miranda-chan | C mcctm

# EDUCATION

# BSc in Computer Science, University of British Columbia BSocSc in Psychology, University of Hong Kong

Sep 2020 – May 2024

Sep 2015 – May 2019

#### Experience

## Full Stack Software Engineer Intern, MailChannels

Sep 2021 – May 2022

- Maintained cloud-based microservices in areas of email security by implementing new features on a continuous integration and agile development process with Kanban using technologies including Go, Java, and SQL on Linux
- Tested code changes by writing automated unit tests and running services on Docker containers, and deploying code to a test server via Kubernetes hosted on Amazon Web Services (AWS) before deployment
- Deployed feature updates and monitored service stability on the production servers hosted on AWS
- Deployed Slack bot for marketing team to monitor status pages of 500 potential and partnering companies
- Built metrics monitoring system on Datadog to alert potential spam for partnering web hosting providers

# Curriculum Developer & Workshop Facilitator, GIRLsmarts4tech at UBC Sep 2023 – Present

. 1

• Developed and delivered Game Development and AI workshops to 100+ high-school students

# Teaching Assistant for Applied Machine Learning, UBC

Jan 2023 – Dec 2023

• Led weekly tutorials and supported students' learning of abstract machine learning concepts, and its practical applications on data analysis and model building using scikit-learn and pandas

## Volunteer Tutor, The C.O.D.E. Initiative

Aug 2021 – Dec 2023

• Tutored 30+ neurotypical and neurodiverse students on Java, Python, Scratch and Web Development

# Class Therapist, Autism Partnership Foundation

Jul 2019 – Aug 2020

• Provided individualized therapeutic services and school education to 20+ children on the Autism Spectrum

## PROJECTS

## Mario Kart Driving Game | C#, Unity

Sep 2023 – Present

• Developed a 2D driving game inspired by Mario Kart, implementing the game physics system and user interface elements like automated enemy characters for engaging player experience

## Cracking the Coding Odyssey | Python, Javascript, D3, HTML, CSS, Git

Sep 2023 – Dec 2023

- Pre-processed, analyzed and visualized 18000+ data items using Python in generating new data insights
- Implemented a full-stack web application with HTML, CSS and Javascript, incorporating the D3 library to create interactive data visualizations on demographics and behaviours of new coders

## InsightUBC | Typescript, React, Git, Mocha, Chai

Sep 2022 – Dec 2022

- Built a full-stack web application with Typescript using Test-Driven-Development under the React framework for users to query for courses and rooms information at UBC
- Created automated unit tests with Mocha and Chai and end-to-end testing on the UI, attaining full test coverage
- Integrated REST API functionality for client-side to communicate with server-side via endpoints

## Winery Management | Javascript, React, Node.js, PostgreSQL

May 2022 – Aug 2022

- Designed and developed a web application for wine production management with Javascript under the React framework and Node.js runtime environment
- Designed a relational database managed by PostgreSQL, storing all information in JSON format in the back-end, and an user interface for clients to easily query the data from the front-end of the application

#### Tap My Emotions | Java, JUnit

Apr 2021

- Developed a game app with graphical interface for children to better identify emotions with Java
- Implemented based on Object-oriented design principles, storing user inputs in JSON with full Junit coverage

## TECHNICAL SKILLS

Languages: Python, Javascript, Go, Typescript, SQL, Java, C#, HTML, CSS

Frameworks: React, D3, Node.js, JUnit, Mocha, Chai

Tools: Git, Kubernetes, Docker, Amazon Web Services, Maya, Jupyter Notebook, VS Code, IntelliJ

Libraries: Scikit-learn, Pandas, NumPy, Matplotlib