

Miranda Chan

EDUCATION

- BSc in Computer Science, University of British Columbia** Sep 2020 – May 2024
BSocSc in Psychology, University of Hong Kong Sep 2015 – May 2019
- Final Year Thesis: The effects of mismatch negativity (MMN) neurofeedback training on unconscious emotional processing and state anxiety, using electroencephalography (EEG) data via OpenViBE and PsychoPy2

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
- 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