

T: 604.822.9677 | F: 604.822.9676 | science.coop@ubc.ca | www.sciencecoop.ubc.ca

RAY JIA ZHANG

P: (825) 994-9078 | rjzhang100@gmail.com | Portfolio Website | GitHub | LinkedIn Computer Science, Year 3

TECHNICAL SKILLS AND CERTIFICATIONS

PROGRAMMING: Python, Java, C/C++, React.js, Node.js, Express.js, HTML/CSS

TOOLS/ENVIRONMENTS: GitHub, Jupyter Notebook, SQL/MySQL, BigQuery, MongoDB, Docker DATA SCIENCE: Numpy, Pandas, Tensorflow/Keras, Matplotlib, Beautiful Soup, Selenium, Linear Algebra CERTIFICATIONS: Machine Learning (Coursera), Neural Networks and Deep Learning (Coursera), Databases and SQL for Data Science (Coursera, IBM)

PERSONAL PROJECTS

BAR INVENTORY FULL STACK WEB APP (Personal)

Oct 2022

- Fully designed and implemented a MERN full stack application intended to help manage inventory of the bar at Earls Robson
- Built interactive components in React-Bootstrap, composed a RESTful API with Express.js in Node.js and fully containerized the project with Docker

MUSIC COMPOSITION AI (Personal)

Aug 2022

- Designed and trained a multi-layered LSTM neural network end-to-end in Tensorflow/Keras on Keras' Functional API to compose short MIDI clips
- Engineered an automated data pipeline to prepare 22,297 multi-featured training examples sourced from the MAESTRO dataset for network input
- Compared and contrasted two different network models to improve efficiency by 35% and performance by 65%
- Produced a dataflow diagram to organize and track data as it moved through the pipeline

USED CAR WEB SCRAPER (Personal)

Jul 2022

- Implemented a web scraper to aggregate used car data from Facebook Marketplace
- Automated login and web searching process with Selenium to fully automate collection process
- Targeted specific HTML tags and data with Beautiful Soup to search and collect desired data

CRYPTOCURRENCY BANK ACCOUNT (Academic)

Dec 2021

- Developed a cryptocurrency bank account in Java with fully interactive GUI built in JSwing, with an emphasis
 on proper and scalable OOP principles
- Engineered and deployed comprehensive unit tests in JUnit

WORK EXPERIENCE

SIERRA WIRELESS

Software Developer - Web Application

Richmond, BC

Jan 2023 – Aug 2023

EARLS KITCHEN + BAR

Vancouver, BC

Bartender

May 2022 - Nov 2022

- Produces consistent, high-quality beverages for the entire restaurant while simultaneously providing personalized service for customers seated at the bar
- Closely ensures compliance with provincial liquor legislation and regulation
- Accurately writes cash-out reports at the end of each shift and meticulously tracks waste and expenditures

EDUCATION

UNIVERSITY OF BRITISH COLUMBIA

Vancouver, BC