Guanghua Yang

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Education

UNIVERSITY OF BRITISH COLUMBIA | BACHELOR OF SCIENCE MAY 2020 – AUG 2022

- Computer Science Major with Distinction
- CGPA 88/100 | UGPA 88/100

SIMON FRASER UNIVERSITY | BACHELOR OF APPLIED SCIENCE SEP 2019 – APR 2020

- Computer Science Major
- CGPA: 4.05/4.33
- SFU 2020 Spring Alumni Scholarship | SFU 2019 Fall entrance scholarship

FRASER INTERNATIONAL COLLEGE SEP 2018 – AUG 2019

- CGPA: 3.865/4.33

Skills

- Programming Language: R, Python, Java, C++, MATLAB, JavaScript, HTML, SQL, Julia
- Framework and Packages: Scikit-Learn, PyTorch, TensorFlow, ***Node.js***, Spark, ***react***, ***express***, MongoDB
- Interpersonal skills: Technical report development, Multitasking abilities, Time management

Teaching Experience

COMPUTER SCIENCE TEACHING ASSISTANT **VANCOUVER, BC**

CPSC 320 Intermediate Algorithms and Design Jan 2022 – Apr 2021

- Weekly meetings with course staff to discuss improvements to the course
- Updating weekly tutorial and assignment questions
- Holding weekly office hours where students may get help on assignment, and course concepts
- Leading weekly tutorials and aiding students
- Grading assignments, midterms, and final exam

Academic Experience

APPLIED INDUSTRY PRACTICES **CPSC 455**

E-Commerce Web Application Apr 2022 – Aug 2022

- Designed an e-commerce platform supporting roles from guests to buyer to seller
- Included a variety of features from upload products, drag&drop pictures and cart operations to more advanced integration such as live chat
- Built an express server that storing data in MongoDB, connected to the client built with react-redux
- Support login with google account, and user authentication.
- Applied release engineering techniques, including setting up GHA, and CI/CD

SOFTWARE ENGINEERING **CPSC 310**

UBC Insight Façade Jan 2022 – Apr 2022

- Built a web application that parses datasets about courses and rooms at UBC in Typescript, and allows querying for information about the courses, rooms, and course scheduling
- Used HTML libraries for the front end, and express framework for the back end
- Implemented unit tests using Mocha throughout the project to ensure top quality of the system
- Used GitHub to allow team collaboration and keep track of changes made throughout development

MACHINE LEARNING AND DATA MINING **CPSC 340**

Data Scientist's Salary Prediction Apr 2021 – Jun 2021

- Replaced NaN or -1 values with mean or median based on distribution for numerical features
- Reduced dimensionality by trimming features have more than 10 categories
- Feature selection by information gain and correlation matrix
- Applied Linear regression, lasso, random forest, and gradient boosting to fit the model and choose random forest model based on NRMSE, with 89.7% accuracy