Yuzhen Mao

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EDUCATION

Simon Fraser University, Vancouver, BC, Canada

2021 - present

Master of Science in Computer Science

- Thesis: "Transfer Learning in Biomedicine"
- Advisor: Martin Ester

Simon Fraser University, Vancouver, BC, Canada

2019 - 2021

Bachelor of Science in Computer Science (With Distinction)

- Got full marks (4.33/4.33) in: Data Mining, Applied Discrete Data Analysis, Computer Vision

Zhejiang University, Hangzhou, Zhejiang, China

2017 - 2021

Bachelor of Engineering in Computer Science and Technology (Dual Degree Program)

- Got full marks (5.0/5.0) in: Data Structure and Algorithm, Introduction to Big Data, Software Engineering

Research Experience

Dataprep: Data Preparation in Python

Simon Fraser University

September 2020 – April 2021

- Advisor: Prof. Jiannan Wang

Undergraduate Research Assistant

- Worked on adding data analysis and visualization functions into an open-source python package

3DMI: Pixel-to-voxel with Mutual Information Constraints

Simon Fraser University

Undergraduate Research Assistant

September 2020 – January 2021

- Advisor: Prof. Ke Li
- Worked on adding mutual information constraint and weight into 3D generators to improve the performance

PROJECTS

Instance Segmentation

Summer 2020

 $Started\ from\ a\ baseline\ model\ to\ improve\ an\ object\ detection\ framework\ to\ detect\ planes\ in\ aerial\ images\ Designed\ and\ trained\ deep\ convolutional\ neural\ networks\ using\ Pytorch\ and\ Detectron2$

Airbnb Data Analysis

Spring 2020

Analyzed an Airbnb dataset to predict how popular an apartment rental listing will be

Used several machine learning algorithms, including decision tree, logistic regression, SVM, XGBoost and stacking

Cart-Pole Stabilization

Spring 2020

Kept the cart's position near zero and the pole near upright for as long as possible in a Gym environment Implemented the policy gradient algorithm with average reward baseline using TensorFlow

SCHOLARSHIPS AND AWARDS

•	President's & Dean's Honour Roll, Simon Fraser University (TGPA of 4.00 or higher)	Feb. 20	021
•	Undergraduate Open Scholarship, Simon Fraser University (CGPA of 3.67 or higher)	Jan. 20	021

• Stood 19th/61 in the 2019 Pacific NW Regional ACM Programming Contest (Division 1)

Dec. 2019

EXTRACURRICULAR ACTIVITIES

• Study China Program

Aug. 2018

Helped 120 students from several British universities successfully complete their 21-day study program in China