YUJIE ZHU

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EDUCATION

University at Buffalo

Buffalo, U.S.

Doctor of Philosophy in Computer Science and Engineering

Sept. 2024 –

Presidential Fellowship

New York University

New York, U.S.

Master of Science in Computer Engineering

Sept. 2022 – May 2024

• **GPA:** 3.90

• Scholarship: \$7000.

Southern University of Science and Technology

Shenzhen, China

Bachelor of Science in Applied Mathematics

Aug. 2017 – July 2022

• **GPA:** 3.57

• Honors: Outstanding Graduates of Mathematics Department, 2022;

Merit Student Scholarship for Exceptional Performance, 2019–2020;

PUBLICATIONS

Yujie Zhu. (2021). <u>Self-supervised Learning for Small Shot COVID-19 Classification</u>. *2021 3rd International Conference on Information Technology and Computer Communications* (pp. 36–40). ACM ISBN 978-1-4503-8988-4/21/06.

RESEARCH EXPERIENCE

COVID-19 CT Image Classification

Project Assistant

Sept. 2020 – Mar. 2021

- Developed four COVID-19 CT image CNN classification models based on transfer learning and self-supervised learning with TensorFlow to improve the accuracy of the test set by nearly 30%.
- Applied a residual structure and multi-task learning with Python to enhance image classification performance, the highest accuracy of the training set reaches 95.31%.

PROJECTS

Detection and Classification of Traffic Signs and Lanes

Nov. 2021 – Dec. 2021

Machine Learning Course

- Compared the performance of detection and classification models based on YOLO, Resnet V1 101 and Fast R-CNN when faced with blurry and noisy training sets.
- Applied the models to SUSTech's night lane photos for testing.

Recap SkrGAN Model of Medical Imaging

Nov. 2019

Introduction to AI Course, Team Leader

- Organized group members to read literature and write literature reviews about SkrGAN; responsible for making schedules and overseeing the project's progress.
- Analyzed the model's application in clinical diagnosis and old picture restoration, as well as its potential future developments.

VOLUNTEERING

CIEE Council on International Educational Exchange

Yamaguchi, Japan

International volunteer teacher

July 2019

- Taught 50 local junior high students Chinese culture in Japan.
- Hold the English workshop for elementary school students to enhance their English proficiency through multiple interactions.

TECHNICAL SKILLS

Java, Python, C++, TensorFlow, MATLAB, R, LaTeX, Wireshark.