YUJIE ZHU

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EDUCATION

New York University

New York, U.S.

Master of Science in Computer Engineering

Sept. 2022 – May 2024 (Expected)

• **GPA:** 3.83

- Coursework: Data Structure and Algorithm; Operation System; Network Security.
- Scholarship: \$7000.

Southern University of Science and Technology (QS #301 in world #15 in China) Shenzhen, China Bachelor of Science in Applied Mathematics Aug. 2017 – July 2022

- **GPA:** 3.57
- Coursework: Machine Learning; Mathematical Modeling; Discrete Mathematics.
- Honors: Outstanding Graduates of Mathematics Department, 2022;
 Merit Student Scholarship for Exceptional Performance, 2019–2020;
 SUSTech Scholarship for Freshmen, 2017

RESEARCH EXPERIENCE

Institute of Computing Technology, Chinese Academy of Sciences

Remote

Research Assistant

Nov. 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%.

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.

COURSE PROJECTS

Detection and Classification of Traffic Signs and Lanes

Nov. 2021 – Dec. 2021

Machine Learning

- 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, 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 and mathematics 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.