## 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

- Developed detection models based on YOLO to identify traffic signs' and lanes' location.
- Classified traffic sign categories using Resnet V1 101.
- 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.