# Ruiyang Zhang

# EDUCATION

Bachelor's Degree in Computer Science and Technology, Fudan University

Sep 2017 - Jun 2021

## Work Experience

Backend Development Engineer, Meituan, Shanghai

July 2021 - Jun 2023

## Research Interests

Computer Vision; Deep Learning

# RESEARCH EXPERIENCES

#### Video Instance Segmentation

March 2021 - Jun 2021

- Developed a DNN which encodes the video into a spatio-temporal feature pyramid.
- Implemented channel attention and spatio-temporal attention mechanisms to enhance performance.
- Demonstrated superior results on the Youtube-VIS dataset compared to previous approaches.

#### COVID-19 Detection

March 2020 - Jun 2020

- Designed an advanced deep learning model based on DenseNet with CBAM(Convlution Block Attention Module).
- Enabled accurate classification of chest X-rays into Covid, No-Covid, and Normal categories.
- Developed a heatmap visualization to identify disease areas in X-ray images.

#### Speech Recognition

March 2019 - Jun 2019

- Collect and annotate a speech dataset of 20 Chinese words.
- Utilized FFT(Fast Fourier Transform) for feature extraction and trained a CNN for robust speech classification.
- Achieved an impressive recognition accuracy of 91.3% through rigorous experimentation.

# WORK PROJECTS

#### Zebra System

March 2022 - March 2023

- Spearheaded the development of a comprehensive marketing supply activity system.
- Implemented key features such as supply activity configuration, operation authority management, and supply data retrieval.
- Utilized a technology stack including Spring Boot, Pigeon, Thrift, MySQL, Redis, Kafka, Crane, Caffeine, and Lion.

#### Rainbow System

July 2021 - Feb 2022

- Played a key role in supporting the daily iterations of the system.
- Developed supply list components and incorporated exposure labels for improved functionality.
- Designed and implemented an Elasticsearch index for efficient supply retrieval.
- Technology stack: Spring Boot, Pigeon, MySQL, Redis, Kafka, Crane, Lion, Elasticsearch.

# CORE QUALIFICATIONS

**Programming**: Python, C/C++, MATLAB, Java

**English**: IELTS 7.0/9.0(L8.0 R9.0)

# AWARDS AND HONORS

Second Prize, China Undergraduate Mathematical Contest in Modeling (CUMCM), 2019 Third Class Scholarship for Outstanding Students, Fudan University, 2018 2019 First Prize, Chinese Mathematical Olympiad in Jiangsu Province (CMO), 2016 First Prize, National Olympiad in Informatics in Jiangsu Province (NOIP), 2014 2015