

Zhaoyu Zhang

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Education

University of Manchester

MENG IN COMPUTER SCIENCE, EXPECTED FIRST-CLASS HONOURS

Manchester, UK

Sep. 2018 - June. 2022

- Relevant Modules: AI and Games, Computer Vision, Text Mining, The Internet of Things, Software Security, Data Engineering, Algorithms and Complexity, Databases, Logic and Modelling, Object-oriented Programming, Mobile System, and Cryptography.

International Division of Hubei Wuchang Experimental High School

A* IN A LEVELS

Wuhan, China

Sep. 2015 - June. 2018

- A* in Further Mathematics, A* in Chemistry, A* in Mechanics, A* in Statistics, A in Physics, A in Core Mathematics.

Wuhan Wuluolu Middle School

ZHONGKAO (GCSE EQUIVALENT) 462/550, 108/120 IN MATH, 114/120 IN ENGLISH

Wuhan, China

Sep. 2012 - June. 2015

Work Experience

iFLYTEK Co., Ltd.

PROJECT APPLICANT AND DEVELOPER INTERN

Wuhan, China

Jul. 2021 - Sep. 2021

- Responsible for project declaration, development, docking, acceptance, and launch, etc.
- Conducted research on the development of digital economy industry and optical fiber interception.
- Using librosa, WebRTC, Pytorch and UIS-RNN classification algorithms under Python, the speech extraction under the TIMIT corpus was completed, including basic speech noise reduction, framing, separation, classification, recognition, etc.
- Speech extraction accuracy: 98%, Speech recognition accuracy: 97% (Test set: Texas Instruments, MIT, SRI International TIMIT continuous speech corpus)

Hubei Provincial Foreign Affairs Office

ASSISTANT AT VISA SERVICE CENTER OF THE MINISTRY OF EUROPE

Wuhan, China

Jun. 2019 - Sep. 2019

- Coordinated and arranged more than 10 colleagues to receive scholars from Babes-Bolyai University in Romania for a week-long friendly exchange activity in Hubei Province
- Completed bilingual translation of 6 relevant work documents and reports in both Chinese and English
- Use Excel and PPT to participate in planning and organize the itinerary during the Han Dynasty. List the optional information of 30+ attractions and projects, and select the best plan according to factors such as time, personnel and weather, which is adopted by leaders

Projects

Optimizing Minimal Counterexamples

SOLE DEVELOPER

Manchester, UK

Mar. 2022 - May. 2021

- Help users better understand bugs (Identify and locate errors) in java programs by reducing the numerical size of counterexamples generated by java BMC (Bounded Model Checker)
- The feasibility of reducing the counterexample value was verified by using two java BMCs, JPF (Java PathFinder) and JBMC (Java Bounded Model Checker)
- Configure and test various error types such as deadlock, race conditions, overflow, underflow in the gradle environment
- All benchmarks in SV-COMP were checked by employing JBMC

Road Tracking in Aerial Images

SOLE DEVELOPER

Manchester, UK

Sep. 2020 - Apr. 2021

- Without the use of GPS, by analyzing the satellite images returned by the drone, extracting location information surround it (match similar objects on the map to locate the camera) to establish the scope of the drone's activities
- Using Jupyter Notebook to implement OpenCV, Keras model and U-Net machine learning algorithm under Python to locate the drone
- Accuracy is around 100 meters for well-trained models

Stendhal Local Enhancement

IMPLEMENTER

Manchester, UK

Nov. 2019 - May. 2020

- Added new cheating commands in the Stendhal game: teleportation, resurrection, invincibility, auto-following, auto-pathfinding
- Expanded maps on the basis of the original game: added two new accessible scenes
- Modified attributes of the original items: life recovery of food, attack power of weapons, defense power of clothing, etc.
- REST API/TDD and Web/SPRING frameworks in Java are used

Skills

DevOps Git, CR, Github Actions

ML Pytorch, Numpy, Matplotlib, Jupyter, Pandas, TensorFlow(Keras), Scikit-learn.

Programming Python, Java, SQL, HTML/CSS, LaTeX, OpenCV

Language Chinese (Native), English (Fluent)

Other Markdown, command-line and various IDE like VSCode and JetBrains.