Zizhuo Wang

393 Middle Huaxia Rd., Shanghai, 201210

wangzzh@shanghaitech.edu.cn | (+86) 182-0173-3632 | https://wangzzh1998.github.io/

EDUCATION

SHANGHAITECH UNIVERSITY, Shanghai, China   Sept. 2017 - Expected June 2021

Bachelor of Engineering, Computer Science

- GPA 3.29/4.0
- Coursework: Focus on Artificial Intelligence-related topics such as Optimization and Machine Learning, Computer Vision

EXPERIENCE

SHANGHAI CENTER FOR BRAIN SCIENCE AND BRAIN-INSPIRED TECHNOLOGY, Shanghai, China

Research Assistant, Laboratory of Cognition Intelligence   *Apr. 2020 – Present*

- Implemented an automatic problem-solving system using natural language processing and heuristic research, which is able to solve 80% primary school mathematics problems in Chinese, with the goal of alleviating the shortage of teachers and lowering the cost of home tutoring for impoverished students, particularly in the Covid-19 online learning environment.
- Natural Language Toolkit (NTLK) was used to transfer the given conditions and questions to logic expressions from natural Chinese language.
- Designed the system to be more adaptable to primary school teaching by making it more similar to the problem-solving process of human beings than using problem-solving templates; built a library of mathematical rules and concepts and expressed them in the same way as the given conditions and questions.
- Applied heuristic research, with the help of a well-designed distance function measuring the distance between known facts and target questions, to search for the answer of the target questions from the given conditions, in which for each step, the existing facts and rules are combined to generate new facts that help decrease the distance towards the question.

SHANGHAITECH UNIVERSITY, Shanghai, China   2017 – Present

Assistant Engineer, Student Science Innovation Center   *Nov. 2018 – Present*

- Assembled and repaired various types of 3D printers (including from XYZmaker, Snapmaker and JGmaker), as well as laser cutting machines from Snapmaker.
- Guided students on the usage of 3D printers and laser cutting machines including the usage of the supporting software like Solidworks, the skills of building 3D model with appropriate structure and adjusting the power of laser for different cut materials.

Teaching Assistant, Institute of Humanities   *Sept. 2017 – Jan. 2018*

- Assisted teaching argument essay writing and literature review in Chinese for *Modern Chinese Literature: Reading and Writing* course, which covered most of influential modern Chinese literature including novels, poetry, drama script and collections of essays.

Assistant for Admissions Office, Undergraduate Admissions Division   *Jun. 2018 – Aug. 2018*

- Scheduled and organized undergraduate admissions information sessions in three high schools in Zhengzhou, Henan. Gave presentations to high school students and their parents and answered questions about ShanghaiTech.

ACTIVITIES

SHANGHAI QINGAI HEALTH CENTER, Shanghai, China

Volunteer   *Jun. 2018 – Present*

- Disseminated information of preventing AIDS HIV in LGBT community using social media.

FENGCHENG COUNTY, Jiangxi, China

Social Practicum   *Aug. 2018*

- Investigated pilot projects of circular economy and green agriculture and composed an investigative report.

SKILLS AND HOBBIES

- Languages: Chinese (Native), English (Fluent), TOEFL Score: 107
- Computer Skills: Python, Pytorch, C, C++, Rust
- Hobbies: Table tennis, classical music