Xiaochong Jiang
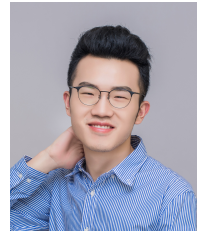
No.97, Jinshui Wenhua Road
Zhengzhou, China 450000
℘ *(+86)132 5330 0480*
✉ *jiang853749402@gmail.com*
🖰 *jxcup.github.io*

Education

Sep. 2015 - Present

Zhengzhou University, *Zhengzhou*, Henan China.
- Major in Computer Science.
- Research advisors: Dr. Yangjie Cao, Dr. Cong Yang, Dr. Bo Zhang

Potential Interests

My project experience mainly involves robotics, automatic speech recognition, embedded development, computer vision and indoor positioning technology. I'm happy to continue working on related fields. Additionally, I have a keen learning ability when I face a new field. I'm highly motivated to obtain a doctorate in SLAM and related research fields in the future.

Professional Experience

Research

Mar. 2018 - Present

A Lower Limbs Rehabilitation System for ICU Patients.
- Supervised by Dr. Haichuan Ren
- We are constructing a hardware and software system, and our robot is designed to reducing the risk of amputation due to muscle atrophy of the lower limbs during the patients' fainting. And in the software section, providing a friendly interface for doctors.
- I work with electric and mechanical teammates to design the conduct plan, and my primary job is to visualize the status of patients to doctors and the communication between upper computer and microcontroller.

Sep. 2017 - Feb. 2018

Device-Free Wireless Localization and Activity Recognition.
- Supervised by Dr. Yangjie Cao and Dr. Cong Yang
- We employ physical layer Channel State Information (CSI) as the indicator of activities. Using the multiple transmitter-receiver links to achieve omnidirectional personnel detection near the receiver, and the LSTM network structure to train the data set.
- My contribution lies in the research and selection of existing indoor positioning technology, the establishment of experimental environment, data collection and preprocessing.

Feb. 2018

MCM:The Mathematical Contest in Modeling.
- Supervised by Dr. Cong Yang
- We are required to predict the numbers of native speakers and total language speakers and the geographic distributions of these languages in the next 50 years. Then propose the best solution for the location of six overseas offices of an international company.
- My primary task is to program and help build models. (We have three people, one modeling, one programming, one writing)

Sep. 2017

General Software Engineer Intern.
- Our group completes a simple, smart home project at Briup Technology, Inc. and won the third prize in the final assessment.

Mar. 2017 - **A Climbing Robot for Detecting Bridge Crack**.
Sep. 2017
- Supervised by Dr. Yangjie Cao
- We build a hardware and software system, the design of the robot inspired by the inchworm. We construct a two-legged multi-joint robot with three gaits(twist, reverse, and inchworm gait). And there is a cloud platform to receive the collected data in real time.
- I participate in robot assembly and control, the communication between the upper computer and the cloud platform.

Feb. 2017 - **A integrated intelligent home robot with vision and voice**.
Jun. 2017
- Supervised by Dr. Yangjie Cao
- We assume a scene which the home nurse robot can follow the owner's instructions and monitor for abnormalities through its version.
- I contribute to realizing voice recognition and visual system.

Dec. 2016 - **Settled in the Innovation and Entrepreneurship Base of Zhengzhou University**.
Present
- Our team is accredited to the base and conducted the first simulation of the venture. I am the team leader.

Jul. 2016 - **A Home Nurse Robot Based on Kaldi Speech Recognition System**.
Dec. 2016
- Supervised by Dr. Yangjie Cao
- Our robot can be controlled by voice. We use the open source Kaldi speech recognition system, THCHS-30 (a free Chinese corpus)as a training data set.
- I contribute to voice recognition by Kaldi, then making and controlling the robot.

Feb. 2016 - **UAV-based haze detection system**.
Jun. 2016
- Supervised by Dr. Yangjie Cao
- We use UAV to collect haze data at different altitudes in different regions to achieve visualization
- I contribute to the drones assembly and as the manipulator

Teaching Experience

Mar. 2017 - **Teaching Assistant**, *Arduino Embedded Development(773257)* , Zhengzhou University.
Jun. 2017
- Teaching Assistant with Dr. Yangjie Cao

Patents

Feb. 2018 **An Artificial Inchworm Climbing Robot Suitable for Truss Structures**.
Yangjie Cao, Pengsong Duan, B Zhang, Zhijin Yang, **Xiaochong Jiang**, Yaqi Feng

May. 2017 **A Bionic Climbing Robot Suitable for Cable Bridges**.
Yangjie Cao, Pengsong Duan, Zhijin Yang, **Xiaochong Jiang**, Kaidong Zhao

Skills

Languages: C++, Python, Shell, Markdown, LaTeX, HTML

Tools: OpenCV, Matlab, Arduino, Linux

Selected Honors and Awards

Apr. 2018 Honorable Mention in The Mathematical Contest in Modeling

Apr. 2018 Second Prize in "Challenge Cup" National College Student Business Plan Competition

May. 2017 Second Prize in "Challenge Cup" National College Student Curricular Academic Science and Technology Works Competition

2017 Merit Student of Zhengzhou University, Zhengzhou University

2016 and First-Class Scholarship, Zhengzhou University
2017