# Jinghe Wang

Jinghe Wang
Tel: +86-19822901909 | Email:vikiwang@stu.scu.edu.cn

# \_\_ Education =

09/2019-06/2023

## **Sichuan University**

- (Bachelor of Engineering) Automation
- Overall Average Score: 81(Compulsory: 80)
- **❖** GPA:3.1 (Compulsory: 3.0)

## =Research Experiences=

10/2022-06/2023

## Team Leader Blood Cell Image Classification Research Based on Semi-supervised Deep Learning

- \* The dataset including more than 15000 blood cell images in which only about 5000 images are labeled
- Using label propagation and MixUp improves the performance of Mean-Teacher and FixMatch models for blood cell classification up to 0.891
- The EMAN layer in the teacher network is replaced by BN layer providing more stable data normalization, with the classification accuracy improved by about 2.3%

11/2021-10/2022

Team Member | The impact and mechanism of Internet use on the physical and mental health of the urban and rural

#### elderly

- \* The propensity score matching method deals with self-selection bias, using three matching methods of K-neighbor matching, radius matching and kernel matching to obtain the net effect of Internet use on the health of older adults
- \* The standard error for single matches may be biased, so it was adjusted using the self-sampling Bootstrap method. Compared with older people who did not use the Internet, it increased by 0.037~0.045 units higher in physical health and 0.021~0.0246 units higher in mental health.

10/2020-09/2021

Team Leader | Research on Trajectory Optimization of UAV-aided Communication for 5G and Future Communication

#### **Systems**

- Leveraging the concept of state-space model, a control-based UAV trajectory design is proposed, which takes into account both the UAV's kinematic equations and the dynamic equations
- the UAV's controller design is achieved along with the trajectory optimization, where practical roll angle and pitch angle constraints are considered
- Numerical results are provided to validate the derived energy consumption model and the effectiveness of our proposed algorithms.

09/2022

# Team Leader | China Undergraduate Mathematical Contest in Modeling

- Select the analysis and prediction of ceramic weathering composition, and apply the basic method of statistical regression and test to analyze the relationship between the correlation of each component and the degree of weathering.
- Combining the decision tree methods of machine learning and deep learning on the provided samples to predict the degree of weathering.
- ❖ Won the third prize(top 20%) in Sichuan Province.

#### =Professional Experience=

06/2022-07/2022

Engineer Assitant | ChengduRainbow Appliance(Group) Shares Co.,LTD.

- ❖ Learn the intelligent control system design with the r & d engineer team, responsible for debugging the machine and equipment parameter recording and analysis
- \* According to the user experience and the cost of existing electrical appliances and other factors, from the technical support to improve the efficient and safe home electrical heating water heating appliances and its production equipment and system

### -Additional Information-

- Language: Chinese (Nation), English (CTE-6:579)
- IT Skills: PyTorch, Python, C & TensorFlow
- Hobby:Table Tennis,Calligraphy,Tennis,Guitar