Shengtao Guo

Phone number：18259818008 Email address：shengtao_guo@stu.hqu.edu.cn

Website：https://gsssst.github.io/ Data of birth：09/23/2001

EDUCATIONAL BACKGROUND

2020.09 – 2024.06 Huaqiao University Internet of Things Engineering

- **Majors:** Data Structure, Operating System, Computer Network, Pattern Recognition, Computer Vision, Embedded System。

PROJECT EXPERIENCE

2021.05 – 2022.05 Deep Learning based Method Research on Anime Style Recognition (National Training Program on Undergraduate Innovation and Entrepreneurship 2021)

- **Content:** The deep learning method is applied to the study of style recognition of animation images, and a style recognition system suitable for animation images is constructed.
- **Responsible for the content:** As a member of the project, I collected and organized animation image data sets by using dataset related tools and databases. Develop and manage experimental codes, and summarize experimental data results. Read a lot of cutting-edge papers on deep learning, and deeply participate in project paper writing.
- **Achievements:** Haotang Li, **Shengtao Guo**, Kailin Lyu, et al. A challenging benchmark of anime style recognition. IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshop (CVPRW), 2022.（**CCF-A Conference, The 2nd author**）

2022.05 – 2023.05 Optimization Research on Self-Attention Mechanism in Vision Neural Network (National Training Program on Undergraduate Innovation and Entrepreneurship 2022)

- **Content:** A dynamic convolution module is introduced into the existing vision Transformer model to make up for its lack of local feature extraction capability, thereby improving the model's accuracy on relatively small-scale data sets. A re-identification system suitable for vehicles is constructed by combining the dynamic convolution module and Transformer model.
- **Responsible for the content:** Lead the project as the project leader, plan the project plan and follow-up progress, assign and manage the main tasks of each project member. Search and read relevant literature on dynamic convolution, learn relevant knowledge of dynamic convolution, conduct in-depth development of experimental code for embedding dynamic convolution module into Transformer network model, and conduct experiments on Market-1501, VeRi-776 and other data sets. Read deep learning about patents and write patent papers.
- **Achievements:** J. Zhu, **S. Guo**, et al. Vehicle re-identification method based on dynamic convolution transducer:

AWARDS STATUS

2022	China Undergraduate Mathematical Contest in Modeling Fujian Division(Captain)	The First Prize
2023	9th Fujian Province "Internet +" College Student Innovation and Entrepreneurship Competition	The Silver Prize
2022	National Undergraduate Electronic Design Contest Fujian Division(Captain)	The Second Prize
2022	12th MathorCup University Mathematical Modeling Challenge(Captain)	The Third Prize
2023	14th "Blue Bridge Cup" National Software Competition	The Third Prize

SKILL

- Language skill：Passed CET-4, have a certain degree of oral English ability.
- Professional skill：C, C++, Java, Python and other mainstream programming languages; Pytorch, OpenCV, Scikit-Learn and other machine learning libraries; LabelMe data set annotation tools; LaTeX paper writing tools; Visio drawing software tools; MATLAB software; Mainstream Linux platforms such as Raspberry PI.