Chen, Xingyi / 陳 星熠

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EDUCATION   2018/09-2023/11

The University of Hong Kong   **Hong Kong, China**
Master's Degree in *Computer Science (in progress)*
Research Interest: Deep Learning Technology

Tongji University   **Shanghai, China**
Bachelor's Degree in *Electronics Science and Technology (2018/09-2022/07)*
Core Courses: Computer Vision, Chinese Information Processing(NLP), Digital Image Processing, C/C++ Programming, Data Structures, Linear Algebra, Probability and Mathematical Statistics
CGPA: 84.4/100
Selected Honors:
- Excellent Graduate of Tongji University   **2022/06**

WORK EXPERIENCES

Westlake University   **Hangzhou, China**   **2022/12-2023/07**
Research Assistant
Multi-camera-based VSLAM Navigation System, Cooperation Project between Westlake University and Muyuan
- Designed and built a data acquisition vehicle equipped with multiple cameras, LIDAR, GPS and INS, with all sensors controlled by the ROS2 system;
- Implemented a large-scale scene relocation algorithm based on single-view images and produced a SfM model of a large-scale urban scene.

Tongji University   **Shanghai, China**   **2022/08-2022/11**
Research Assistant
AI-based Wireless Channel Modelling, Cooperation Project between Tongji University and Huawei
- Modified the real number calculations such as convolution and ReLU function of CycleGAN to complex number calculations to improve the learning effect of the network on the phase information of wireless signals;
- Replaced computationally difficult parts in traditional methods by using the generator trained by GAN to solve the high-dimensional channel realization matrix from the low-dimensional measurement data vector.

ZF Asia Pacific Technical Center   **Shanghai, China**   **2022/03-2022/06**
Algorithm Intern
Forward vehicle lane change prediction for L2 self-driving cars, Company's Own Research Project
- Optimized the auto labeler script that can automatically label the ground truth for image radar detection and motion prediction and completed the labeling task exploiting the script;
- Developed a Qt embedded interactive interface for simulation software that presents various indexes as it simulates a car running on the road.

PROJECT

Real-time Heart Rate Monitoring with Remote Photoplethysmography Technology
- Made a program, which supports both AI algorithms and unsupervised algorithms, to extract the user's heart rate from the human face captured by IoT camera.

Stock Price Prediction with Federal Learning LSTM
- Utilized FATE framework to train a price prediction LSTM model so that it can be updated by federal learning.

Image Distal Detail Super-resolution Recovering
- Made a new dataset with more license plate information to fine-tune the parameters of the ESRGAN model, resulting in a better performance of recovering blur license plate images.

STUDENT WORK EXPERIENCES
- Class Head, Department of Electronic Science and Technology   **2020/09-2022/07**
- President, Innovation Club   **2020/09-2021/08**

SELECTED AWARDS
- National University Student E-Commerce Championship Shanghai District Trial – Special Award   **2021/07**
- China University Intelligent Robot Creativity Competition – Second-level Award   **2020/12**
- Asian Youth Robot Championship VEX U Engineering Challenge, Skill Category – First Runner-up   **2019/12**

SKILLS

Language:
- IELTS 6.5

Computer Skills:
- Python, Linux, Docker, ROS, C++, ARM Assembly Language, Multisim