Fanpeng Meng (孟繁鹏)

mfp0610 □ github.com/mfp0610



EDUCATION

Huazhong University of Science and Technology.

Sep 2019 - Jun 2023

Artificial Intelligence, Bachelor

Wuhan, China

GPA: 3.71/4.00

Honor: School Outstanding League Member (2021, 2020), Self-improvement & Technical Innovation Scholarship (2020).

University of Cambridge

Jul 2021 - Aug 2021

Artificial Intelligence, Bachelor

Cambridge, England

Research exchange student of artificial intelligence, under supervision of Prof. Pietro Lio.

RESEARCH EXPERIENCE

Non-line-of-sight (NLOS) Computer Vision

Sep 2020 - Present

Research intern, HUST Ken.X.Wang's Lab

Wuhan, China

This subject aims at realizing non-line-of-sight (NLOS) computer vision, and classify the MNIST handwritten digits database.

- Responsible for the design of classification algorithm using on the speckle getting from the original dataset, attempt different loss function and compare their performance.
- Analyze the features of the speckle and explore the relationship between the speckle and the original data.

PROFESSIONAL EXPERIENCE

Suzhou Zhito Technology

Jul 2021 - Aug 2021

Algorithm engineer intern, Al Technology Department

Shanghai, China

Algorithm engineer intern for SLAM, based on the fushion of lidar and vision images.

• Use FastFCN to achieve the semantic segmentation, and mark the poles on the 3D point cloud. Changchun Yidong Clutch CO.,LID Suzhou R&D Center

Jan 2021 - Mar 2021

Software engineer intern, Software Development Department

Software engineer intern for control system and algorithm.

Suzhou, China

- Learn the development process of the control system of automatic clutch, and the V-model development process. Learn Simulink modeling and code generation, CCU (clutch control unit) downloading, and the calibration software INCA.
- Participate in the development of automatic clutch project, use Simulink to design CPD module (calculate clutch status, and the position and action information of the clutch pedal), use INCA to complete the CPD module test and vehicle calibration.

PROJECT EXPERIENCE

Game Project - Ants Rescue

Sep 2021 - Nov 2021

Full stack engineer

Wuhan, China

A game project. Rescue a ant without walking into any obstacles. Complete the project independently.

- Project was developed by C++ based on the QT framework.
- Design the map generation algorithms, use the Floyd's Tortoise and Hare algorithms to eliminate the dead-end maps, and use the BFS algorithm to find the nearest food blocks and obstacles.

Project link: https://github.com/mfp0610/Ants-Rescue

A Tightly Coupled SLAM System Based on VIO

Jan 2020 - Jul 2020

Machine vision algorithm engineer

Wuhan, China

This project aimed to develop a complete set of multi view 3D reconstruction system, so as to realize the function of 3D surface model reconstruction based on machine vision OpenCV library.

- Responsible for the call of the SLAM vision algorithm and successfully implemented the VINS-MONO algorithm released by the HKUST on the target vehicle.
- Responsible for the design of the path planning algorithm, use HybridAstar algorithm and successfully implement in C++.

HONORS & AWARDS

"Weipai" Seed Cup Innovative Software Algorithm Contest - Rank2 (2/174)

2020.11

HUST Renesas Cup Smart Car Competition - Rank4 (4/82) National Olympiad in Informatics in Provinces - the First Prize 2019.11 2018.11

CLUB & ORGANIZATION

PivotStudio Student Team

Nov 2020 - Present

Operation Team Leader, Co-founder

Wuhan, China

PivotStudio is an enthusiastic campus Internet team, focusing on developing creative campus applications.

• As one of the co-founders, I participated and led the early some of early preparations. Currently serve as the leader of the operation team, mainly responsible for the construction of team system and the products operation.

Team Link: https://www.linkedin.com/company/pivotstudio-cn/

AIAHUB student forum

Apr 2020 - Present

General Manager, Founder

Wuhan, China

AIAHUB is a folk platform for the exchanging and sharing of resources in the School of Automation of Huazhong University

of Science and Technology. It contains information on various aspects.

• I created this forum and have been operating this platform. At present, about 250 people have joined the forum. Forum Link (Github): https://github.com/AIAHUB

SKILLS LIST

- Language: Python, C/C++.
- Tools: Linux, OpenCV, QT, Simulink.
- Skills: Computer vision, Deep learning, Algorithms and data structures.

CERTIFICATIONS & OTHERS

- Languages: English (CET-4), Mandarin (mother tongue)
- Interests: Football, Chinese Painting (Level 9 of Flower and Bird Major), Guitar