

YIN AIWEI

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EDUCATION

Politecnico di Milano, Milan (Italy)

September 2019 - Present

Bachelors Degree in Computing Engineering (Double Degree)

Tongji University, Shanghai (China)

September 2016 - July 2019

Bachelors Degree in Electronic Information and Engineering

GPA: 89.1/100

EXPERIENCE

Research Assistant

Tongji Intelligent Vehicle Group

Development of a new SLAM system

June 2019 - September 2019

- Utilization of YOLO to detect objects and used Dual Quatrics to represent objects in the 3D environment for pose optimization
- Solution of Data Association problem in SLAM via a Nonparametric function on back_end

Research Assistant

Broadband Wireless Communication and Multimedia Lab. of Tongji

Was involved in the development of an Auto-Parking system

September 2018 - December 2018

- Development of an Around View System
- Deployment of the system on nVIDIA PX2 and testing of the system on real vehicle

leader of CV group

Robomaster 2019 - Team Superpower

member of CV group

Robomaster 2018 - Team Superpower

- Utilization of Low-Level Object Detection Algorithm to detect and track a target with high speed (200 FPS) on CPU
- Solve the 3D location of the target and track the motion of target via Kalman Filter
- Control a two-axis gimbal to sight at the target with high speed (response time <100ms) and high precision (steady-state error <0.5°)
- Launch projectiles to hit the motion target in the distance up to 10 meter

PROJECTS

Tongji SITP program

Pedestrian monitoring in elevator via deep learning

- Designed and trained an End-to-End Neural Network to count people in the elevator from image

PhotoStick

An Android app for presenting and sharing photos

- Development of web page and back_end

Rail Eyes

An IoT railway pedestrian warning device

- Thales Project Arduino Campus Winner (Second Prize)

HONORS

Robomaster 2019 Final Tournament, Second Prize

ZhangRenliang student scholarship

Robomaster 2018 Final Tournament, First Prize

Tongji excellent student scholarship

SKILLS

Programming C++/C, python, MATLAB, HTML/CSS/Javascript

System Ubuntu, ROS

Software Library OpenCV, OpenGL, g2o, Eigen, PyTorch

Multi-Lingual Chinese, English, Italian