

YIN AIWEI

(+39)3476119921 ♦ aiwei.yin@polimi.it ♦ www.yinaiwei.com

EDUCATION

Politecnico di Milano, Milan (Italy)

September 2019 - Present

Bachelors Degree in Computing Engineering (Double Honors)

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 (https://github.com/tiev-tongji/quadric_slam.git)

- Utilization of YOLO to detect objects and used Dual Quadric 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

- 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 AND AWARDS

Robomaster 2019 Final Tournament, Second Prize

Robomaster 2018 Final Tournament, First Prize

ZhangRenliang student scholarship

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