# YIN AIWEI

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#### **EDUCATION**

Politecnico di Milano, Milan (Italy)

September 2019 - July 2020

B.S. in Engineering of Computing Systems (Informatica) Double Honor Degree

GPA: 27.78/30

Tongji University, Shanghai (China)

*September 2016 - July 2019* 

B.E. 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 Quadric to represent objects in the 3D environment
- Solution of Data Association problem in SLAM via a probabilistic method on back\_end
- Experience in C++, g2o, Eigen and ROS

**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
- Experience in C++ and OpenCV

leader of CV group member of CV group Robomaster 2019 - Team Superpower

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  $<0.5^{\circ}$ )
- Launch projectiles to hit the motion target in the distance up to 10 meter

#### **PROJECTS**

Santorini

Polimi Final Project of Software Engineering

- A multi-player online card games implemented via Java and JavaFX

**PhotoStick** 

An Android app for presenting and sharing photos

- Developement of web page and back\_end with Python, Flask and Javascript

**Rail Eyes** 

An IoT railway pedestrain warning device

- Thales Project Arduino Campus Winner (Second Prize)

### **HONORS**

Robomaster 2019 Final Tournament, Second Prize Robomaster 2018 Final Tournament, First Prize ZhangRenliang Scholarship of Tongji University Tongji Scholarship of Excellent

## **SKILLS**

**Programming** C++/C, JAVA, Python, MATLAB, HTML/CSS/Javascript **System** Ubuntu, ROS, Arduino **Software Library** OpenCV, OpenGL, g2o, Eigen, PyTorch **Multi-Lingual** Chinese, English, Italian(basic)