

# Yin Aiwei

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## EDUCATION

CURRENT	Bachelor's Degree in COMPUTING ENGINEERING (Double Honors)
SEPT. 2019	Politecnico di Milano, Milan (Italy)
JULY 2019	Bachelor's Degree in ELECTRONIC and INFORMATION ENGINEERING
SEPT. 2016	Tongji University, Shanghai (China)
	GPA: 89.2/100

## PROJECTS AND EXPERIENCE

### Research

JUNE-SEPT. 2019	Research Assistant Development of a new SLAM system ( <a href="https://github.com/tiev-tongji/quadric_slam.git">https://github.com/tiev-tongji/quadric_slam.git</a> ) <ul style="list-style-type: none"><li>- Utilization of YOLO to detect objects and used Dual Quadric to represent objects in the 3D environment for pose optimization</li><li>- Solution of Data Association problem in SLAM via a Nonparametric function on back_end</li></ul>	Lab. of Intelligent Vehicle in Tongji
SEPT.-DEC 2018	Research Assistant Was involved in the development of an Auto-Parking system <ul style="list-style-type: none"><li>- Development of an Around View System</li><li>- Deployment of the system on nVIDIA PX2 and testing of the system on real vehicle</li></ul>	Lab. of Internet of Vehicles in Tongji

### Competition

SEPT. 2018-JULY 2019	leader of CV group	Robomaster 2019 - Team Superpower
SEPT. 2017-JULY 2018	member of CV group <ul style="list-style-type: none"><li>- Utilization of Low-Level Object Detection Algorithm to detect and track a target with high speed(200 FPS) on CPU</li><li>- Solve the 3D location of the target and track the motion of target via Kalman Filter</li><li>- Control a two-axis gimbal to aim at the target with high speed(response time &lt; 100ms) and high precision(steady-state error &lt; 0.5°)</li><li>- Launch projectiles to hit the motion target in the distance up to 10 meter</li></ul>	Robomaster 2018 - Team Superpower

### Project

MAR. 2018-MAR. 2019	Tongji SITP program	Pedestrian monitoring in elevator via deep learning
APRIL-JUNE 2018	PhotoStick <ul style="list-style-type: none"><li>- Development of web page and back_end</li></ul>	An Android app for presenting and sharing photos
SEP.-NOV. 2017	UNO <ul style="list-style-type: none"><li>- Thales Project Arduino Campus Winner (Second Prize)</li></ul>	An IoT railway pedestrian warning device

## HONORS AND AWARDS

JULY 2019	Robomaster 2019 Final Tournament, Second Prize
JULY 2018	Robomaster 2018 Final Tournament, First Prize
STEP. 2018	ZhangRenliang student scholarship
STEP. 2017	Tongji excellent student scholarship

## SKILLS

Programming:	C++/C PYTHON MATLAB HTML/CSS/JAVASCRIPT
Software Library:	OPENCV OPENCL G2O EIGEN PYTORCH
System:	UBUNTU ROS
Multi-Lingual:	CHINESE ENGLISH ITALIAN(BASIC)

## INTERESTS AND ACTIVITIES

110-meter hurdle champion at the 45th sports competition of Tongji  
Volunteer in 2019 Formula 1 Chinese Grand Prix