

ZIRUI ZHAO | Curriculum Vitae

No.28 Xianning West road, Xi'an, Shaanxi, P. R. China, 710049

✉ Xi'an Jiaotong University

✉ ryan_zzr@outlook.com 🌐 <https://1989Ryan.github.io/>

EDUCATION

Xi'an Jiaotong University

Xi'an, China

School of Electronic and Information Engineering

Sep. 2016 - Present

- Major in Automation (Honors Engineering Program, Qian Xuesen Class); Major Average Score: 93.15 (GPA: 3.94 / 4)
- Won the admission to Qian Xuesen Class (the honor undergraduate program in XJTU, top 120 out of 4000 students in XJTU).
- Cumulative Average Score: 90.39 (GPA: 3.82 / 4)

School of Management

May. 2018 - Present

- Double major in Business Administration.

National University of Singapore

Singapore

2018 Summer Workshop, School of Computing.

Jul. 2018 – Aug. 2018

- Participated in the IoT and security “Tele-Robotics & Deep Learning” project.

SCHOLARSHIPS AND HONORABLE TITLES

- **Siyuan Merit Scholarship** in 2017 (Awarded to the top 30% of 119 students in Qian Xuesen Class, XJTU)
- **Excellent Student** in 2017 & 2018 (Awarded to the top 20% of 119 students in Qian Xuesen Class, XJTU)
- **Second Prize of “1989 Mechanical Alumni Scholarship for Qian Class”** in 2018 (Awarded to 4 candidates out of 119 students in Qian Xuesen Class, XJTU)

RESEARCH EXPERIENCE

- Machine learning & Computer Vision Open Experiment Program | IAIR XJTU** *Sep. 2017 – Apr. 2018*
Faculty Advisor: Pengju Ren, Associate Professor at IAIR, the School of Electronic and Information Engineering, XJTU.
 - Accomplished some basic classification tasks based on the dataset of MNIST and CIFAR-10 using ResNet50.
 - Joined the contest of Design Automation Conference in 2018 as an assistant and responsible for preprocessing the dataset and some basic tasks for inference acceleration of CNN using TensorRT.
- Multi-agent Collaborative Navigation in robots, Exploration and Structured Semantic Information Establishment | IAIR XJTU** *Apr. 2018 – Present*
Faculty Advisor: Pengju Ren, Associate Professor at IAIR, the School of Electronic and Information Engineering, XJTU.
 - Accomplished visual SLAM in ground robot vehicle and UAV.
 - Actualized the prediction of depth images from RGB images using reinforcement deep learning.
 - Enforced acceleration of inference of SqueezeDet for target detection in UAV.
 - Established the TEB algorithm for path planning in ground robot vehicle.
- Tele-Robotic and Deep Learning Project | NUS SoC Summer Workshop 2018** *Jul. 2018 - Aug. 2018*
Faculty Advisor: Soo Yuen Jien, Professor at Department of Computer Science, School of Computing, NUS.
 - Conducted the team to build an autonomous blind-guide robot with Arduino and Raspberry Pi.
 - Actualized the computer vision task by inception model and Azure service for obstacle detection.
- 2018 Global College Technical Summer Training Camp | JD AI Research** *Aug. 2018*
Supervisor: Dongdong Chen, Researcher at Department of Machine Learning, JD AI Research.
 - Utilized the MI-FSGN algorithm for black-box untargeted attack on deep neural network.
 - Established the Naive Mutation algorithm for targeted attack on deep neural network.

COMPETITIONS AND AWARDS

1. **Chinese Mathematical Modeling contest** *May. 2017 – Sep. 2017*
 - Got the **First Prize** of Shaanxi Province.
2. **2018 DAC System Design Contest** *Dec. 2017 – Jun. 2018*
 - Assistant for image processing, model optimization and got **rank of 4/21 in GPU Platform**.
3. **Big Data and Artificial Intelligence Contest** (Hold by XJTU and Baidu) *Jun. 2018 – Jul. 2018*
 - Finished the image classification task and got **rank of 39 / 300**.
4. **2018 Global College Technical Summer Training Camp** (Hold by JD AI Research) *Aug. 2018*
 - Finished the task of Targeted black-box attack on deep neural networks with **second rank**.

MISCELLANEOUS

1. **Language:** English, Chinese (Native).
2. **Skills:** PR(Basic), AE(Basic), Excel(Skilled), PPT(Skilled), Latex(Basic).
3. **Interests:** Music (Singing), Badminton.