

# HAO WANG

No.28, Xianning West Road, Beilin District, Xi'an, Shaanxi Province, China

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## EDUCATION

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**Xi'an Jiaotong University**

*September 2014 - June 2018*

B.E. in Electrical Engineering and Automation

Overall GPA:3.68/4.3 87.5/100

Top 10%

Related Courses: Programming Languages, Software Engineering, Intro. to Computer structure, Machine Learning, CNN for Visual Recognition, Data Structures and Algorithms

## HONORS & QUALIFICATIONS

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Outstanding Graduate of XJTU	2018
National Scholarship (6 out of 337)	2017
1 <sup>st</sup> Prize of the 3 <sup>rd</sup> GaN System Competition organized by CPSS	
The Silver Award of Shaanxi Province in the 3 <sup>rd</sup> "Internet +" Competition	
National Encouragement Scholarship (12 out of 337)	2016
2 <sup>nd</sup> Prize in Mathematics Modeling Contest of Shaanxi Province	
Excellent Student of XJTU	
National Encouragement Scholarship (12 out of 337)	2015
1 <sup>st</sup> Prize in Mathematics Modeling Contest of XJTU	

## TECHNICAL STRENGTHS

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<b>Computer Languages</b>	C/C++, Python, MATLAB, LaTeX, SQL
<b>Tools</b>	PyTorch, TensorFlow, PCL, Linux, SLAM

## RESEARCH & EXCHANGE EXPERIENCE

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**Internship in UISEE**

June 2019 -

*3D Object Detection*

- Point clouds pre-processing, including using PCL for data reading, filtering, calibration, feature extraction and visualization.
- 3D Object detection based on VoxelNet and F-PointNet, implement data augmentation to improve performance on our own data set and balance real time and accuracy.

**Handwritten Numbers Recognition Program**

May 2019

*Leader*

- Labeled images with one-hot method and divided MNIST dataset to train, validation and test set.
- Trained and predicted handwritten numbers using the DNN with Softmax output and GradientDescentOptimizer in TensorFlow, got an accuracy of 91%.
- Established a three-layer convolutional neural network with pooling layer to increase the recognition accuracy of MNIST to 97%.

**China Mathematical Contest in Modeling**

August 2018

*Leader*

- Analyzed the principal component and the classification result to find anomalous center and data.
- Used the K-Means and FCM algorithms to classify the terrorist attacks.

**UAV Development, National University of Singapore**

12 July, 2017 - 10 August, 2017

*Core member*

- Processed sensor data with Kalman filter, exchanged messages between laptop and APM 2.6 based on MAVLINK Protocol and used Mission Planner to monitor drone.
- Collaborated in a team of three to discuss project specifications, task assignments and solutions.
- Presented weekly progress to the tutor to ensure deadlines were met.

**Development of Information Management System with MCU**

March 2017 - May 2017

*Leader**Innovation Training Program, XJTU*

- Designed a system that can recognize ID cards, display information like identification photo and book lending information, and can change the password online.
- Completed program development of AT89C51 MCU in C language and communication between the client and host.
- Developed the user-friendly interface in JAVA.
- Realized the query, addition, deletion and modification of MySQL database.

**EXTRA-CURRICULAR**

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**Minister of Tang Zhongying Love Society.**

September 2017 - July 2018

- Responsible for the materials management, sending notices and team building.
- Organized various activities like bag guards and visiting the elderly in the community to pass love, care and attention.

**Member of Runner Club**

September 2016 - Present

- Take professional running training every week and run a marathon once a year.
- Swim, play badminton and regularly go to gym with other members.