

# HAO WANG

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

(+86)182 9287 6175 [allan0703@foxmail.com](mailto:allan0703@foxmail.com)

## EDUCATION

### **Xi'an Jiaotong University**

B.E. in Electrical Engineering and Automation

*September 2014 - June 2018*

Overall GPA:3.68/4.3 87.5/100

Top 10%

Related Courses: Programming Languages, Software Engineering, Intro. to Computer Structure, Machine Learning, CNNs for Visual Recognition, Data Structure and Algorithm

## HONORS & QUALIFICATIONS

|   |      |
|---|------|
| 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

|                           |                                       |
|---------------------------|---------------------------------------|
| <b>Computer Languages</b> | C/C++, Python, MATLAB, LaTeX, SQL     |
| <b>Tools</b>              | Visual Studio, MATLAB, PyTorch, Linux |

## RESEARCH & EXCHANGE EXPERIENCE

### **Visiting Student, Visual Computing Center of KAUST**

October 2019 - Present

- Analyzed the oversmoothing of graph convolution networks from the perspective of matrix principle and spectrum, and proposed a metric to measure it.
- Implemented the shape-preserving GCN inspired by visualization and trained the model on PPI dataset.
- Participated in the project of neural architecture search for point cloud object detection, and completed a part of the code and experiments.

### **Internship in UISEE**

June 2019 - September 2019

*Research Intern*

- Implemented the 3D object detection algorithms based on point cloud, and did parameter tuning on the dataset collected from actual scenes.
- Did data augmentation to recognize various pose features of objects by rotation, translation, and scaling.
- Programming training in C++ with open source libraries PCL and OpenCV.

### **CAN Bus Security Analysis**

December 2017 - February 2018

*Core Member*

- Built the experimental hardware environment using STM32F767, USB-CAN converter and PC.
- Analyzed the security issues of the CAN protocol based on the communication mechanism and experimental results.
- Proposed the algorithm that added random numbers to defend replay attack and verified the effectiveness through experiments.

**Design of High Efficiency and High Power Density Inverter**      August 2017 - October 2017  
*Core Member*      *GaN System Competition, CPSS*

- Designed a single-phase inverter using GaN Devices with 300kHz  $f_s$  and 95% efficiency, operating on islanding mode.
- Helped to decide the main circuit topology and control strategy, and simulated the system in PSIM and Simulink.
- Completed the design and test of signal sampling and conditioning circuits.
- Finished a part of the code of DSP with CCS and debugged the whole system.

**UAV Development, National University of Singapore**      12 July, 2017 - 10 August, 2017  
*Core member*

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

**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, and realized the 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

---

**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 2014 - June 2018

- Took professional running training every week and ran a marathon every year.
- Swam, played badminton, and regularly went to gym with other members.



## Test Report Form

ACADEMIC

**NOTE** Admission to undergraduate and post graduate courses should be based on the ACADEMIC Reading and Writing Modules.  
GENERAL TRAINING Reading and Writing Modules are not designed to test the full range of language skills required for academic purposes.  
It is recommended that the candidate's language ability as indicated in this Test Report Form be re-assessed after two years from the date of the test.

Centre Number CN172

Date 26/APR/2019

Candidate Number 010553

### Candidate Details

Family Name WANG

First Name HAO

Candidate ID 130427199707035912



Date of Birth 03/07/1997

Sex (M/F) M

Scheme Code Private Candidate

Country or Region of Origin CHINA (PEOPLE'S REPUBLIC OF)

Country of Nationality

First Language CHINESE

### Test Results

Listening

7.0

Reading

8.0

Writing

6.0

Speaking

6.0

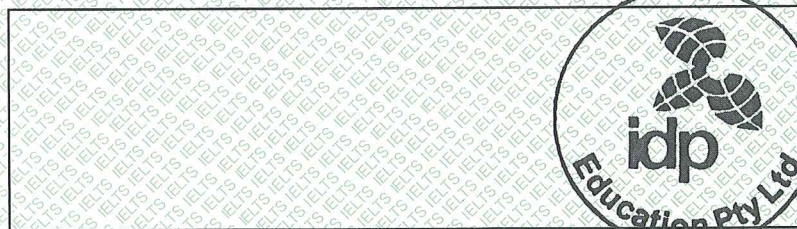
Overall Band Score

7.0

CEFR Level

C1

### Administrator Comments



Administrator's Signature

Date 02/05/2019

### Centre stamp



### Validation stamp



Test Report Form Number

19CN010553WANH172A



**HAO WANG**

**Most Recent Test Date: April 4, 2019**

**Address:** NO.28,XIANNING WESTROAD, BEILIN DISTRICT,XI'AN, XI'AN, Shaanxi,  
710049 China

**Registration Number:** 5194336

**Email:** 172317795@qq.com

**Phone:** 86-18292876175

**Date of Birth:** July 3, 1997

**Social Security Number (Last Four Digits):**

**Gender:** Male

**Intended Graduate Major:** Electrical & Electronics Engineering -- Other (1299)

### Your Scores for the General Test Taken on April 4, 2019

#### Verbal Reasoning

Your Scaled  
Score:

**154**

65th  
Percentile

#### Quantitative Reasoning

Your Scaled  
Score:

**166**

90th  
Percentile

#### Analytical Writing

Your  
Score:

**4.0**

59th  
Percentile

### Your Test Score History

#### General Test Scores

| Test Date     | Verbal Reasoning |            | Quantitative Reasoning |            | Analytical Writing |            |
|---------------|------------------|------------|------------------------|------------|--------------------|------------|
|               | Scaled Score     | Percentile | Scaled Score           | Percentile | Score              | Percentile |
| April 4, 2019 | 154              | 65         | 166                    | 90         | 4.0                | 59         |