Wei ZHANG

Email： yidazhang2@qq.com Mobile： (86) 153 0145 3650

Educational background

Yangzhou University (YZU), School of Physical Science and Technology **2016.09-2020.06**

- Bachelor of Science in Electronic Information Science & Technology, GPA: 82.5/100; Rank: 6/41
- Dual Degree in Business English, GPA: 80.76/100; Rank: 23/76, the second language: JLPT-N3:75
- Awards: Totally won 12 national and provincial awards, 28 municipal and school-level awards

Winter Academic Program at Nanjing University (NJU), School of Electronic Science and Engineering **2019.01-2019.02**

- Being the only student who passed the selection in YZU (Only 100 undergraduates were selected from Jiangsu Province)
- Took part in academic lectures and artificial intelligence (AI) development trainings, received trainings in facial recognition, target detection and image processing etc.
- Orally reported the study of " Identification of Agricultural Diseases and Pests Based on Machine Vision" as a student representative
- Completed the Arm Smarter Connected(ASC) Course on AI Development held by Arm Education and IThing Edu

Publications

- **Wei Zhang**. "A Survey of FPGA Based CNNs Accelerators". SCI: Chinese Journal of Electronics (CJE). (Under reviewed)
- **Wei Zhang**. "A Design of 3D Dynamic Display System Based on Voice Control". Chinese Journal of Electron Devices. (Under reviewed)
- Kaige Gao, **Wei Zhang**, Chunlin Liu, et al. "Strain induced ferroelectric and pyroelectric in (4-(Aminomethyl)pyridinium)2MnCl4•2H2O". SCI: Journal of Crystal Growth.(Under reviewed)

Patents and Copyrights

FOUR Patents:

- Xiaoying Den, **Wei Zhang**, Xiaofeng Yang, Weifeng Chen. A Webcam Embedded with Real-time Environment Information [P]. CN209608763U, 2019-11-08.
- Xiaofeng Yang, **Wei Zhang**, Xiaoying Deng, Weifeng Chen, et al. A Reading-aid Device for the Bling Based on Raspberry Pi [P]. CN209281692U, 2019-08-20.
- Zijia Wang, **Wei Zhang,** Xiaofeng Yang, Wei Wang, et al. A System for All-purpose Campus Card United with Business Member Based on IOT and RFID Technology [P]. CN208722234U, 2019-04-09.
- A 3D Dynamic Display System Based on Voice Control, **1st Patent Inventor** (Under Submission)

SEVEN Granted Software Copyrights:

- An Interactive AI System Software Featuring Dynamic Facial Expression Recognition and Voice Chatting, registration no.: 2019R11S0455589, **1th inventor**
- A System Software Used in a Bluetooth-controlled Car for Authentication Based on Dynamic Facial Recognition, registration no.: 2019R11S0455589, **1th inventor**
- An Eco-regulation System Based on Internet and Real-time Monitoring, registration no.: 2019SR0619769
- A smart car system with tracing and photography functions, registration no.: 2019SR0676736, **2nd inventor**
- A 3D Dynamic Display System Based on Intelligent Voice, registration no.: 2019SR0223080, **1th inventor**
- A Robot Control System Server Based on WebServer Technology , registration no.: 2018SR879516, **1th inventor**
- An Intelligent Rainbow Light System Software Based on Wi-Fi Module, registration no.: 2018SR773134

Research Experiences

A Design of Indoor Self-navigating Meal Delivery Robot Based on Facial Recognition (Awarded as Excellent Project)

School- level College Students' Science and Technology Innovation Competition (No.: x20180186), **Program Leader** 2018.05-2019.05

- Familiarized with Raspberry Pi, and used it to recognize simple facial expressions based on statistics of face feature points (accuracy rate: 86.3%)
- Independently established LAN server based on Web Server and realized robot's indoor self-navigation

E-reading Aids for Visually Impaired People Based on Optical Character Recognition (OCR) and Text to Speech (TTS) Techniques (Awarded as Excellent Project)

School- level College Students' Science and Technology Innovation Competition (No.: x20180186), **Third Author** 2018.05-2019.05

- Developed research proposal

- Designed the hardware structure of the e-reader with CAD
- Used Raspberry Pi to recognize characters based on Baidu character recognition database

A 3D Display System with Intelligent Voice Based on FPGA (2nd Prize) **(My GitHub's Page:** https://github.com/ChromeWei)

2018 National College Students' FPGA Innovation Design Competition, Project Leader 2018.12 -2019.05

- Summarized the design and implementation of FPGA-based hardware accelerators under different platforms and network models over the past decade, and analyzed their differences, pros and cons.
- Designed a full-colored 12*12*12 LED cube
- Designed cascade driver circuit with low power consumption, and used it to connect multiple ready-made LED cubes to make up an advanced LED cube dynamic display system

A Voice Robot Based on Emotion Analysis (2nd Prize) **(CSDN Page:** https://blog.csdn.net/Charmve **)**

The 2nd National University Contest on Intelligent Robotic Innovations, Project Leader 2019.01-2019.05

- Realized the simple expression recognition according to face feature points by OpenCV and Python
- Realized 3D physical games such as 3D Greedy Snake and 3D Tetris on LED cubes

Rolling Ball Control System, A Design of Simulated Electromagnetic Curved Gun Experiment Platform (Provincial 2nd Prize of National Electronic Design Competition) **Individual Research** 2018.03-present

- Used MATLAB Simulink for simulation and Keil C++ for programming, mastered control algorithms including PID and Kalman filtering

Major Coursework Design Project (Ranking First in All Major Courses Design projects) 2017.03-present

- *Electronic Engineering Practice*: an indoor positioning method based on the combination of location fingerprints and least squares, the positioning accuracy up to 18.3cm
- *PCB (Printed Circuit Board) Design and Fabrication*: mastered the use of Altium Designer and the design of common circuits
- *Analog-to-digital Electronic Circuit Design*: generation of multiple waveforms (2015 National Undergraduate Electronics Design Contest)
- *Interface Technology*: built an automatic measurement system, used MFC host computer to conduct program control over signal generator and oscilloscope, realized the automatic measurement of the designated hybrid digital-analog circuits

Social Practice and Volunteer Experiences

Provincial College Students' Innovative Entrepreneurial Training Program (No.: 201911117138T): Yangzhou Maiwei Microelectronics Co., Ltd., Leader (1st Prize, Peeli Campus Venture Competition in Jiangsu Province) 2017.10-2018.11

- Developed electronic products which are based on microcontrollers, provided technical support for college students' projects and competitions, gained a gross profit of more than 100 thousand Yuan.
- Provided computer programming and electronic DIY trainings for primary and secondary school students, opened information innovation classes and summer and winter camps

Volunteer Experiences (OVER 250 hours of volunteer services)

- Won the honorary title of "Top100 Volunteer" initiated by *www.zggyw.org*, and got full membership of *International Association of Volunteers* Youth Action Committee 2018.11
- Volunteering for *The 19th Sports Games of Jiangsu*, as an assistant referees of the youth team of basketball games 2018.08
- *Yangzhou Jianzhen International Half Marathon*, **Outstanding volunteer** 2018.04&2019.04
- Responsible for the recruitment of volunteers in mainland China for *The 2019 World Summer Special Olympic Games*, Group leader

Awards

- **National 3rd Prize**, **1st Prize in East China**, "Discovery Cup" Software Design Competition of National College Students' "Internet Plus" Innovation Contest 2018 2019.04
- National Encouragement Scholarship (**5%**); Fei Xiaotong Scholarship of Morality Cultivation (**1/794**) 2017.11&2018.11
- Title of "***New Youth for a Powerful Nation***" of National Summer Voluntary Teaching (selected among 300 people nationwide by the Department of Schools of Central Committee of the Communist Youth League of China, China Youth Daily and people.cn) 2018.10
- **East China Region 2nd Prize**, National College Student Embedded Chip and System Design Competition and Smart Interconnect Innovation Competition 2019.10