



- 辅修第二学位：经贸英语，第二外语日语等级：JLPT N3，英语 CTE6、雅思 6

- 作为本校唯一一名本科生入选江苏省大学生万人计划，发表一作 SCI 论文一篇；
- 参加学术讲座及人工智能开发实训，学习人脸识别、目标检测、图像处理等内容，并通过 arm 中国人工智能开发课程考核
- 作为学生代表进行口头报告“基于机器视觉的农业病虫害识别研究”，获得“优秀营员”和“每日之星”

## Publications

- [1] **Wei Zhang**, “A Survey of Field Programmable Gate Array-Based Convolutional Neural Network Accelerators”. International Journal of Electronics and Communication Engineering. 14(12) 2020. 419-427. <https://publications.waset.org/10011686/pdf>
- [2] **Wei Zhang**, “A Design of 3D Dynamic Display System Based on Voice Control”. Internet of Things Technologies. (Preprint)
- [3] **Wei Zhang**, “F-LS: An indoor positioning method and implementation based on Bluetooth low energy location fingerprint-least squares fusion”. Electronics World. (Preprint)
- [4] **Wei Zhang**, “A Simulated Electromagnetic Curved Shooting Gun Based on Monocular Ranging: Design and Implementation”. Internet of Things Technologies. (Preprint)
- [5] Gao Kaige, Liu Chunlin, **Wei Zhang**, Wang Kangni, Liu Wenlong. (2020). *Pyroelectricity and field-induced spin-flop in (4-(Aminomethyl)pyridinium)2 MnCl4·2H2O*. Royal Society Open Science. 7. 200271. 10.1098/rsos.200271.

## Books

- [1] **Wei Zhang\***. **Computer Vision in Action**. - Computer Vision Algorithms and Applications, a Chinese closed-loop e-book contains source code, notebook, tech community. [[Project website](#)] | [[Online book](#)] | [[GitHub](#)]
- [2] Wei Zhang\*. Open-source: 国内首个占据栅格网络全栈课程《从 BEV 到 Occupancy Network: 算法原理与工程实践》[[Course website](#)] | [[Slides](#)] | [[GitHub](#)]

## Patents and Copyrights

### ★ 27 Patents:

- [6] 张伟. 一种深度学习模型推理加速引擎、系统及设备[P]. (in Examination)
- [7] 张伟. 一种图像嵌入盲水印的方法、攻击方式及系统[P]. PA21117882CN
- [8] 张伟. 一种自动驾驶系统对采集数据进行回放的处理方法[P]. CN115062190A
- [9] 张伟. 面向自动驾驶系统内部模块的消息发布-订阅处理方法[P]. CN115080268B
- [10] 张伟. 一种共享消息的管理方法[P]. CN115114048A
- [11] 张伟. 一种自动驾驶的数据回流处理系统[P]. CN116353614A
- [12] 张伟. 一种基于深度学习的图像嵌入盲水印的方法、系统及设备[P]. (in Examination)
- [13] 张伟. 一种数据转换方法、数据结构、转换装置、介质及设备[P]. (in Examination)
- [14] 张伟. 自动驾驶量产集成项目中的全算法在线仿真工具[P]. (in Examination)
- [15] 张伟. 基于 QEMU 的自动驾驶虚拟仿真系统设计[P]. (in Examination)
- [16] 张伟. 漏洞匹配方法、装置、设备及存储介质[P]. PA21119974CN
- [17] 张伟. 攻击者视角下的安全评估方法、装置、设备及存储介质[P]. PA21119975CN
- [18] 张伟. 一种触控模组、系统及反馈控制方法[P]. (in Examination)
- [19] 冀磊, 张伟. 一种低功耗蓝牙通信中继方法、装置、设备及存储介质[P]. PA21100821CN
- [20] 冀磊, 张伟. 一种低功耗蓝牙连接阻断方法、装置、设备及存储介质[P]. PA21100820CN
- [21] 张伟, 冀磊. 一种蓝牙设备追踪方法、装置、设备及存储介质[P]. PA21100823CN
- [22] 张伟, 冀磊. 一种蓝牙通信参数解析方法、装置、设备及存储介质[P]. PA21100822CN
- [23] 张伟. 一种动态显示系统、装置及方法[P]. PA20120327CN (in Examination)
- [24] 张伟. 一种显示阵列控制电路、装置及光立方 [P]. (in Examination)
- [25] 邓小颖, 张伟, 杨啸风, 陈卫峰. 一种嵌入实时环境信息的网络摄像头[P]. CN209608763U, 2019-11-08.
- [26] 杨啸风, 张伟, 邓小颖, 陈卫峰. 基于树莓派的盲人阅读辅助设备[P]. CN209281692U, 2019-08-20.
- [27] 王子佳, 张伟, 杨啸风, 王伟. 一种基于物联网 RFID 技术的校园一卡通联合商家会员系统[P]. CN208722234U, 2019-04-09.

### ★ 9 Granted Software Copyrights:

- [28] Industrial Control System Network Attack Chain Automatic Generation Platform (360 工控网络攻击链路自动生成平台) [CP]. Bo Ye, **Wei Zhang**, Jianqiang Qu. 2021SR1816116.

[29] Industrial Control System Network Topology Drawing Platform (360 工控网络拓扑绘制平台) [CP]. Bo Ye, **Wei Zhang**, Tian Long. 2021SR1816115.

[30] An Interactive AI System Software Featuring Dynamic Facial Expression Recognition and Voice Chatting[S]. **Wei Zhang**, Xiaoying Deng, Wanting Liu. 2019R11S0455591.

[31] A System Software Used in a Bluetooth-controlled Car for Authentication Based on Dynamic Facial Recognition[S]. **Wei Zhang**, Fuzhou Shen, Xiaoying Deng, Lei CHEN. 2019R11S0455589.

[32] An Eco-regulation System Based on Internet and Real-time Monitoring[S]. S Fan, J Sun, Fuzhou Shen, **Wei Zhang**,. 2019SR0619769.

[33] A Smart Car System with Tracing and Photography Functions[S]. Fuzhou Shen, **Wei Zhang**, Saibo Fan, Lei Chen. 2019SR0676736.

[34] A 3D Dynamic Display System Based on Intelligent Voice[S]. **Wei Zhang**, Fuzhou Shen, Ce Sun, et.al. 2019SR0223080.

[35] A Robot Control System Server Based on WebServer Technology[S]. **Wei Zhang**, Xiaofeng Yang, Xiaoying Deng. 2018SR879516.

[36] An Intelligent Rainbow Light System Software Based on Wi-Fi Module[S]. Shaowei Qian, X. Ge, **Wei Zhang**, et.al. 2018SR773134.

**Awards & Honors**

●	National 2 <sup>nd</sup> Prize, the 2nd National University Contest on Intelligent Robotic Innovations.	Team Leader	2019.05
●	National 2 <sup>nd</sup> Prize, 2018 National College Students' FPGA Innovation Design Competition.	Team Leader	2018.12
●	National 3 <sup>rd</sup> Prize, 1 <sup>st</sup> Prize in East China, 2019 "Discovery Cup" Software Design Competition of National College Students' "Internet Plus" Innovation Contest, National College Student Electronic Design Competition (Provincial 2 <sup>nd</sup> Prize)	Team Leader	2019.04
●	National Encouragement Scholarship (5%); Fei Xiao-Tong Scholarship of Morality Cultivation (1/794)		2017.11&2018.11
●	Great 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 2 <sup>nd</sup> Prize, National College Student Embedded Chip and System Design Competition and Smart Interconnect Innovation Competition		2019.10

**Fundings**

Provincial College Students' Innovative Entrepreneurial Training Program,	2019.05 – 2020.05
● Yangzhou Maiwei Microelectronics Co., Ltd., No. 201911117138T, Principal Investigator	
School-level College Students' Innovative Entrepreneurial Training	2018.05 – 2019.05
● A Design of Indoor Self-navigating Meal Delivery Robot Based on Facial Recognition, No. x20180186, Principal Investigator	
● E-reading Aids for Visually Impaired People Based on Optical Character Recognition (OCR) and Text to Speech (TTS) Techniques, No. x20180186, Participator	

**Social Practice and Volunteer Experiences**

CSND Certified Blog Expert, Chinese Software Developer Network, the world's largest Chinese IT technology exchange platform	2021.04
● TechBlogger, focus on machine learning, computer vision	
● Followers: 15.2 k+	
Maiwei AI Lab Builder, Open Source Community, which focus on computer vision, link: <a href="https://github.com/MaiweiAI">https://github.com/MaiweiAI</a>	2020.08 - present
Technical Blog Analyst, Global Affairs, Synced Technology	2020.08 - present
Vice-advisor, Ant Academic Study Center	2020.07 - present
Volunteer Experiences (OVER 250 hours of volunteer services)	2018.07 – 2020.06

**ABILITY**

- 熟练使用 C/C++编程语言，有良好的编码习惯，掌握性能分析、优化技巧;
- 熟悉交叉编译和嵌入式系统，熟悉编译构建系统 Bazel\CMake\Conan，GDB 调试、Profiling 工具使用;
- 熟悉脚本编写 Python、shell，熟悉 Docker 容器化技术;
- 熟悉多线程、高并发编程，熟悉常见系统架构及设计模式;
- 熟悉 Linux 内核并熟练使用 Linux 性能分析工具 perf、gperftool、Trace、eBPF
- 测试驱动开发，闭环思维。熟练 GTEST 单元测试、benchmark 和持续化测试，掌握 DevOps 技术;
- 具有机器学习、深度学习算法项目经验，了解 PyTorch 框架，CUDA 编程;