

Liu Zhen

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EDUCATION BACKGROUND

08/2022-Present	Nanyang Technological University (NTU)	Singapore
	<ul style="list-style-type: none">Major: ElectronicsCore-Courses:<ul style="list-style-type: none">RF Circuit for Wireless Communication AAdvanced Topics in Semiconductor Devices B+Electromagnetic Compatibility Design B+Degree: MSc (deem on 2023)GPA: 4.0/5.0	
09/2018-06/2022	Wuhan University of Science and Technology (WUST)	Wuhan, China
	<ul style="list-style-type: none">Major: Electronic Information EngineeringCore Courses:<ul style="list-style-type: none">Wireless Communications New Technology Scored:94Probability and Mathematical Statistics Scored:98Digital Signal Processing Scored:93Degree: Bachelor of EngineeringGPA: 3.68/4.0 (Ranking: 9/189)	

PATENTS

10/2021	A color 3D printer with a test platform	Patent No.: 202120369182.5
05/2021	The preparation method of a full-colour 3D printing material	Patent No.: 202110583697.X
11/2020	A multi-in-one 3D printing hybrid nozzle equipped with camera	Patent No.: 202011309141.3

HONORS & PRIZES

06/2022	First Prize in National Extracurricular Academic Competition; Chinese National
04/2021	Meritorious Winner in Interdisciplinary Contest in Modeling; Worldwide
11/2020	Third Prize of National College Students Mathematical Contest in Modeling;
08/2020	Second Prize of Cyber Security Competition, WUST
07/2020	Third Prize of Internet + College Students Innovation and Entrepreneurship Competition, WUST
06/2020	The honor of Excellent Volunteer, WUST
06/2020	First Prize of Mathematical Contest in Modeling, WUST
04/2020	Finalist In Interdisciplinary Contest in Modeling; Worldwide
12/2019; 12/2020	Second-class Scholarship, WUST
12/2019; 12/2020	The honor of Excellent Student, WUST

SKILLS

Computer	C/C++, MATLAB, Python, Julia, Swift, Java, Assembly language
Highlights	Piano (Level 8); Advanced in git/GitHub, experience in Docker service

RESEARCH EXPERIENCE

- 05/2020-06/2021 **Design of FDM 3D Printer Based on Machine Vision Feedback | National Innovation Training Program**
- Implemented colour control algorithms;
 - Integrated drive, control and power management circuits;
 - Implemented the control system based on an STM32 chip;
 - Received First Prize in National Extracurricular Academic Competition “The Challenge Cup”
- 04/2021 **Interdisciplinary Contest in Modeling | World-class Competition**
Research on Quantification and prediction of Music Evolution
- Developed Multiple models to quantify musical influence;
 - Applied RNN neural network to analyze the development of “music’s impact on network” in time series;
 - Received Meritorious Winner Prize.
- 04/2020 **Interdisciplinary Contest in Modeling | World-class Competition**
Research on Prediction and Placement Strategies for EDP Population
- Constructed sea level rise model related to human activities to quantitatively predict the global average sea level height and the scale of environmentally displaced persons;
 - Proposed solutions to relocate EDP through cooperative game theory;
 - Wrote thesis independently;
 - Received Finalist Prize.
- 03/2020 **Artificial Intelligence | Individual Research**
- **Object Identify and Chasing**
 - Expanded car motive controller on stm32 to receive both manual and Host (Serial port linked) control
 - Developed on an OpenMV board to capture image input and direct the motive controller
 - Use Micro Python interpreter to realized the colour block tracking of the car.
 - **Pedestrian Action Recognition in Public Scenes**
 - Used pre-trained ResNeXt model, and re-tuned the frozen layer;
 - Achieved 97% accuracy rate on the test set, and received a good generalization effect in the sample space.

STANDARD TESTS

09/2021	IELTS-7.0	Reading 8.0	Listening 8.0	Speaking 6.0	Writing 6.0
11/2021	GRE-317	Verbal Reasoning 149	Quantitative Reasoning 168	Analytical Writing 3.0	

EXPERIENCE

- 06-08/2021 **Guangzhou Xingyu Information Technology Co., Ltd.**
Guangzhou, China
- Tested developers' software modules according to requirements documents.
- 06-08/2019 **Xiantao Dingcheng Non-woven Products Co., Ltd.**
Xiantao, China
- Learned how to operate and support company’s file server, accounting system server, and ERP system server
 - Followed up with the ERP system provider to upgrade and support the company's ERP system.

EXTRACURRICULAR & VOLUNTARY EXPERIENCE

- 2019-2020 Class Advisor Assistant, WUST
- 01-04/2020 Volunteer Coordinator of Local Community Office, China