**Zhen Liu**

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**EDUCATION BACKGROUND**

|  |  |  |  |  |  |  |  |  |  |  |  |
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| 09/2018-06/2022 | **Wuhan University of Science and Technology (WUST)**  **Wuhan, China**   * Major: **Electronic Information Engineering** * Core Courses:  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | |  |  | | --- | --- | | Digital System Design (Verilog HDL) | Scored:88 | | Wireless Communications New Technology | Scored:94 | | Probability and Mathematical Statistics | Scored:98 | | Digital Signal Processing | Scored:93 | |  * Degree: **Bachelor of Engineering** * GPA: **3.68/4.0 (Ranking: 5%)** |
| 08/2022-Present | **Nanyang Technological University (NTU) Singapore**   * Major: **Electronics** * Core-Courses:  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | |  |  | | --- | --- | | Digital IC Design |  | | RF Circuit for Wireless Communication |  | | Advanced Topics in Semiconductor Devices |  | | Electromagnetic Compatibility Design |  | |  * Degree: MSc (deem on June 2023) * GPA: NA (Will be updated when available) |

**PATENTS**

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| 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 consumable | Patent No.: 202110583697.X |
| 11/2020 | A multi-in-one 3D printing hybrid nozzle that can be equipped with a camera | Patent No.: 202011309141.3 |

**HONORS & pRIZES**

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| 11/2020 | Third Prize of National College Students Mathematical Contest in Modeling |
| 08/2020 | Second Prize of PhysicalLaboratory Skills Competition, WUST |
| 07/2020 | Third Prize of Internet + College Students Innovation and Entrepreneurship Competition, WUST |
| 06/2020 | First Prize of Mathematical Contest in Modeling, WUST |
| 06/2020 | The honor of Excellent Volunteer, WUST |
| 04/2020 | Second Prize of Chemical Laboratory Skills Competition, WUST |
| 04/2020 | Excellent Prize of The 4th National University Student Environmental Knowledge Competition |
| 12/2019 | Excellent Prize of National College Creative English Challenge Competition |
| 12/2019; 12/2020 | Second-class Scholarship, WUST |
| 12/2019; 12/2020 | The honor of Excellent Student, WUST |

**skills**

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| **Computer** | **Advanced: MATLAB, Python;** Intermediate: Java, C/C++, Verilog HDL; Basic: Julia, Swift, |
| **Highlights** | Piano (Level 8); Advanced project managing skills via git/GitHub. |

**Research EXPERIENCE**

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| 05/2020-06/2021 | **Design of FDM 3D Printer Based on Machine Vision Feedback | National Innovation Training Program**   * Implemented color 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 onQuantification 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**   * **Car Chasing the Ball** * 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 color 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**

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| 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 2.0 |

**PRACTICAL EXPERIENCE**

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| 06-08/2021 | **Guangzhou Xingyu Information Technology Co., Ltd.**  **Guangzhou, China**   * Evaluated developers' software modules according to requirements documents. |
| 06-08/2019  06-08/2020 | **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**

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| 2019-2020 | Class Advisor Assistant, WUST |
| 01-04/2020 | Volunteer Coordinator of Xiantao Subdistrict Office, China |