Xi Chen

📞 (+86)18957979266 ✉ chenxi036@nwpu.edu.cn

EDUCATION

Northwestern Polytechnical University, Shannxi, China **Sep. 2021 – Jun. 2025(Expected)**
Bachelor of Computer Science *Major: Computer Science and Technology*
GPA: 3.736/4.1   Average Score: 90.29   Rank: 50/243   Percentage: 20.5%

RELEVANT COURSEWORK

- Discrete Mathematics: 92
- Data Structure and Algorithms: 89
- Database Management: 94
- Analysis of signal and system: 91
- Computer Architecture: 92
- Digital Image Processing: 99

ACADEMIC EXPERIENCE

Innovation Training Program for College Students (National Training Project, As the Group Leader) **Spring, 2022**
Research on Smart Home Control Based on Internet of Things *Supervisor: Hao Yan*
- Contributed to a smart home device project leveraging an STM32 microcontroller for environmental detection, enabling alarms, mosquito repellence, and humidification functions.
- Enhanced skills in hardware programming skills in C using Keil, gained proficiency in 3D modeling, understood the fundamentals of common sensors, and designed UI for WeChat mini-applets.

AI Intelligent Speech Internship Program Organized by ASLP Lab, NWPU (As the Group Member) **Summer, 2023**
Personal Speaking Enhancement *Supervisor: Lei Xie*
- Worked in a group to train the given model about Personal Speaking Enhancement, aiming to enhance its performance in separating noise from sources other than the target speaker.
- Enhanced skills in Linux development, bash script writing, learnt how to establish SSH remote connections, and how to utilize GPU acceleration for model training.
- Our group win *Certificate for Excellent Team* in the end of this intern.

A patent for innovation (As the third inventor) **Summer, 2023**
A kind of cutting saw table with automatic pulling material
- Collaborated in the design of an automatic pulling apparatus for Jiangxi Tuozhu Machinery Company, incorporating computer vision to detect bamboo joints and subsequently maneuver to avoid cutting them.

COMPETITIONS & RESEARCH EXPERIENCE

The 24th National Robotics Championship & 13th International Humanoid Robotics Olympiad | *National Second Prize* **Oct. 2022**
- Acquired programming skills for servos by initially programming a robot to perform dance moves.

National 3D Digital Innovation Design Competition 15th Anniversary Elite League | *Provincial Grand Prize* **May. 2023**
- Designed and 3D modeled robot *Bray*, focusing on its mechanical structure and ensuring both appearance and functional efficacy.

The 24th Mathematical Modeling Competition of Northwestern Polytechnical University | *School level First Prize* **Jun, 2023**
- Raised algorithmic models for optimizing healthcare resource allocation in rural areas, focusing on the shortest path to medical facilities and road maintenance costs.

2023 China Robotics Competition & RoboCup China Tournament | *National Second Prize* **Oct. 2023**
- Developed *Qi Li*, a quadruped robot capable of interactive communication, performing pose detection, recognizing music, and dancing in response to auditory cues.

2023 National Student Mathematical Modeling Contest | *Provincial Second Prize* **Nov. 2023**
- Optimized heliostat field layout for tower solar power generation, addressing a new optical efficiency modeling and intelligent algorithm-based layout optimization

HONORS & PRIZES

Outstanding Student | *Honors for students who have been active during the past year.* **2022, 2023**
Second Class Scholarship | *Top 15 % available per college.* **2022**
First Class Scholarship | *Top 5 % available per college.* **2023**
Yajun Wu Specialized Third Class Scholarship | *Only 3 slots available per college.* **2023**

TECHNICAL SKILLS

Language: Mandarin (native), English (CET-4: 645, CET-6: 606, IELTS: 6.5), Japanese (N1 Level)
Programming: C, C++, Python, SQL, Java
Softwares and Technologies: Pycharm, VS Code, MySQL, Solidworks, Keyshot, Keil, Git, LaTeX