# Zheng Luo

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## **Summary**

I major in **computer science** and I am **familiar with mainstream programming languages** as well as a variety of related skills. I've participated in many projects, especially those **requires software engineering skills**, that help me improve my **technical and leadership abilities**. I also have much experience in **embedded systems**. I hope I can turn ideas and algorithms into reality with my computer science skills to make people's life better. Github handle: LuoZheng2002.

## **Skills**

- **Programming Languages:** c++, c#, python
- Web Development: javascript, typescript, html, css, ASP.net, React
- Machine Learning: pytorch (image classification, reinforcement learning)
- Computer Graphics: DirectX, OpenGL
- Embedded Systems: ESP32, STM32, Arduino, Raspberry Pi
- Fabrication: Bantam PCB milling machine, 3D printer
- Miscellaneous: Adobe Premiere Pro, Blender, KiCad, SolidWorks

#### **Education**

### University of Michigan, College of Engineering

Ann Arbor, MI

Bachelor of Engineering in Computer Science

Expected 2025

- Current Cumulative GPA: 4.0/4.0
- Course Highlights: Introduction to Computer Science, Data Structure and Algorithms
- Participated in an ICPC regional contest

#### Shanghai Jiao Tong University, UM-SJTU Joint Institute

Shanghai, China

Bachelor of Engineering in Electronic and Computer Engineering

2021.09-2023.07

- GPA: 3.6/4.0
- Course Highlights: Introduction to Circuit Design, Introduction to Logic Design, Signal and System
- Awards/Honors: Mathematical Contest in Modeling S Price, Huatai Security Scholar

# **Projects**

• A Board Game Strategy Manager Based on Human's Intellectual Pattern.

2022/03-09

- **Designed and implemented** a graphics user interface.
- Led a team of 5 and assigned each team member's work.
- **Designed** an algorithm to link individual strategies into a final solution.
- Assembled a pipeline for customized compiling, linking and testing.
- Tank War AI using Reinforcement Learning.

2021/11

- **Implemented** convolution neural network in c++ from scratch.
- Adopted Markov Decision Process algorithm for AI implementation.
- Interactive Worm Neuronal Model

2023/09-12

■ Implemented EL wires control, video and audio using Arduino, Raspberry Pi and ESP32.