#### **Honors**

Explanatory text and formatting guide.

USACO	National	9,10, 11
Gold		
全球院士论坛	?	Second Prize

# **Activity List**

Explanatory text and formatting guide.

Krypoto Tech Club	Founder, President.
9, 10, 11, 12	Designed and developed a dynamic website for THISDL's Activation Record, offering students and teachers a user-friendly platform to record and manage information efficiently. Had a regular discussing event every friday.

### Click Mood Founder, Software + Prompt Engineer

11, 12

Developed an iOS app using Swift and SwiftUI that lets users effortlessly track their moods. Built-in features include mood logging, intuitive feedback, and personalized mood tracking to foster mindfulness and emotional awareness.

Geek Agent : Researcher, Member. Computer-Us

#### e Agent

11

Joined MIT's research team led by Zengyi Qin, serving as a highschool student researcher on the Geek Agent Project—a novel computer-use agent designed to streamline human-computer interactions through advanced AI technologies. Contributed in the data collection team.

# Collaboration with Stepping Stone (Ongoing)

#### Collaborator.

11

Joined as an AI teacher for underprivileged students at Stepping Stone - a nonprofit charity organization that provides education to the underprivileged students- and then found that teaching by real humans has a lot of issues (unaligned quality, limited influence). Provided online school with teaching AI-agents (ongoing).

#### Volunteer at Stepping Stone

#### Volunteer, teacher

11 Teached at Stepping Stone for underprivileged students in ShangHai.

Context: There is a lot of labor inflow in ShangHai. However, their children are unable to use local educational resources. So, I we aim to help them.

#### Singularity Academy(Ong oing)

#### CEO, Founder.

11

Singularity Academy is an online Al-empowered educational platform, where people learn by doing. It is empowered by Al Principles, Al Dean, and Al teacher Agent. Serving as a whole day school, it empowers students to learn what they want with Al generated materials: the study plan the Al Principal Agent generated, the course plan and teaching plan the Dean planned, and the teaching video, quiz, teaching notes, and a guiding project that the Al Teacher Agent Generated. This will help underprivileged students to really learn what they need with an affordable cost.

#### **Independent Developer**

#### Robotic Arm Project

11

Reproduced and enhanced the DummyRobot inspired by Zhihui Jun.. Carried out complex mechanical processing including CNC, 3D printing, PCB production, and hardware integration. Programmed and tuned PID-based robotic control system; currently optimization with reinforcement learning techniques for improved precision and efficiency. Upgraded the control algorithm(kinematics) in the robotic arm to an innovative control algorithm ARL control

# Al Weather Prediction

#### **Independent Researcher**

9

Implemented a linear regression model using ONLY NumPy to predict February weather patterns. Completed full report and published research online.

(http://conference.krypoto.top/articles/antipfebweatherlr.html)

#### Web Development Projects

#### **Independent Developer**

9,10

Designed and deployed multiple websites including:

- 1. Official website for Tsinghua International School Daoxiang Lake (http://elp.thisdl-sip.cn)
  - 2. Project showcase (http://studio.krypoto.top)
  - 3. Personal hardware store (http://store.krypoto.top)
  - 4. Al Introduction site (http://ai.krypoto.top)
  - 5. Personal blog (http://chrisdsasa.github.io)
  - 6. Game website (http://game.krypoto.top)

Beijing Temples Map (Ongoing) **Founder** 

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## Technical Skill Development

**Learner & Practitioner** 

9,10,11,12

- Programming: C++, Python, JavaScript, HTML/CSS, JAVA, Swift
- Software Engineering: Swift, Swift UI, Core Data, Apple Connect
- Frameworks: Bootstrap, React(Beginner)
- Backend: MySQL, nginx, Gin/Go, Flask

- Embedded Systems: C, Keil
- Hardware Engineering: PCB design, Fusion360, 3D printing
- AI/ML: NumPy, pandas, PyTorch
- Kinematics Algorithm Design: MATLAB

# **Non-academic Activities and Meaningful Experiences**

Explanatory text and formatting guide.

#### Activity 1 Participant of BAAI conferences 2023,2024, 2025

I've attended several conferences about the latest developments in Al both in academia and commercial.

#### Activity 2 Participant of ZGC Forum 2024, 2025

I've been taking care of Eric since he was born in 2007. I played the role of a second mom, changing his diapers, teaching him how to read Chinese and English, and tutoring him with elementary school math problems.

#### Activity 3 Take care of my sister Jiazhuo