

Zachary Fan

Math 2A (20929301)

Excellent self-study and cooperation skills and solid foundation in programming. Now developing a game project as the leader of a 3-person team.



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github.com/Lycoris7e4

SKILLS

C++/C/C# Programming

Using Unix/Linux based systems

Self-study

Cooperation

Pressure Handling

Analytical Skills

Communication Skills

LANGUAGES

English

Professional Working Proficiency

Chinese

Native or Bilingual Proficiency

INTERESTS

Study Algorithms on LeetCode

Make Video Montages with Premiere

Design animations in PowerPoint

2D Platform Games

Badminton

EDUCATION

Mathematic, Honours Degree

University of Waterloo

Courses

- Objected-Oriented Software Development
- Elementary Algorithm Design & Data Abstraction

PROJECTS

Stoicheia (TBD)

Unity 2D Game Development

04/2022 - Present

Details

- A long-term team-work project, which is to design and complete a 2D AVG Platform Game that has most of basic functions (e.g. Camera Effects, Light rendering) and extra optimizations for smoother control of the player.
- Related Skills: **Unity, Visual Studio, C# Programming, Object-Oriented Design, Git, Bash**
- Unity Related Skills: **Blend tree, Animation Frame events, Tilemap, UI system**
- Repo link: <https://github.com/LuluZhu5/Stoicheia>, including our **proposal** and **log**

EXPERIENCE

Robotic Systems Architectures and Programming (08/2020)

- Project built on a 2-week Robot Summer Camp that builds a complete robot control system using Python and tests with a simple robot built with lego.
- Complete a robot with basic ground movement and three attack modes, controlled by a custom handle or computer

First Violin in Shanghai Student Symphony Orchestra (07/2018 - 06/2021)

- Communicate with local musicians in English while attending some international music festivals abroad.
- Cooperate with others as a group to perform some small concert.
- Do voluntary performances for and with autistic individuals.

Museum's docent at Shanghai Entomological Museum (07/2020 - 07/2021)

- Introduce exhibits to visitors and respond to questions including detail explanation, directing and recommendation.
- Train other trainees and volunteers in one-to-many mode.

ACHIEVEMENTS

President's Scholarship of Distinction

Admission average of 95% or higher

ARML National Top 20%

National Top 20% in the ARML Local Mathematics Competition

COMC: Gold (National Ranking)

National Top 25% in Canadian Open Mathematics Challenge

USACO: Silver Division

The second of four levels in USA Computer Olympiad

AP Scholar with Honor Award

Attaining an average score of 5 on all AP Exams taken