

# Aidan Liu

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<https://arti-dev.github.io/>

## Education

**University of Virginia, School of Engineering and Applied Science**

*Expected May 2027*

BS, Major: Computer Science, Minor: Data Science, GPA: 3.884

**Organizations:** First Year Players, Student Game Developers, Cavalier Autonomous Racing

**Relevant Coursework:** Data Structures and Algorithms 2, Intro to Cybersecurity, Computer Systems and Organization 2, Software Development Essentials, Defense Against the Dark Arts

## Experience & Volunteering

**Operations Assistant**, University of Virginia Event Management

*January 2025 - present*

Coordinated with University departments to provide equipment setups for events and meetings. Maintained operations of the University's student hub by providing customer service and renting tables to student organizations.

**Motion Planning Software Engineer**, Cavalier Autonomous Racing

*May 2025 – present*

Collaborated with a highly selective team to develop *cavsim*, an environment to test race line planning algorithms for our autonomous racecar. Competed at the Indy Autonomous Challenge at Laguna Seca in Summer 2025.

## Projects

**Lucid Nightmares 2D Platformer (Student Game Developers Club)**

*GDScript, Godot*

Directed a novel platformer with a team of 12 members where players navigate through dream-like environments by telekinetically manipulating the world around them. Designed and implemented 15+ unique gameplay features spread across 5 challenging levels and released the game on itch.io which received over 100 browser plays.

**Fill in the Wall Minecraft Game Server**

*Java, SpigotMC, MySQL, GitHub Actions*

Programmed a remake of Hypixel's *Hole In The Wall* minigame using modern Minecraft tools and features, and automated continuous deployment of the game to a dedicated server using GitHub Actions.

Marketed a gameplay trailer on YouTube that received 270 views and 20 likes within one day.

**SeeBoard Computer Vision Project**

*Python, OpenCV*

Designed an on-screen keyboard controlled by hand gestures to assist users with tremor-based diseases with a team of 4 for VTHacks 12, which won Best DEI Hack sponsored by Fidelity.

## Honors and Certifications

**Virginia Science Olympiad**

*2022-2023*

Regional Competition: 5<sup>th</sup> (Gravity Vehicle 2022), 2<sup>nd</sup> (Trajectory 2022), 1<sup>st</sup> (Trajectory 2023)

State Competition: 5<sup>th</sup> (Ping Pong Parachute 2022), 2<sup>nd</sup> (Trajectory 2022), 1<sup>st</sup> (Flight 2023)

**International Collegiate Programming Competition**

*2023-2024*

Regional Competition: 2<sup>nd</sup> (2024), 10<sup>th</sup> out of 93 teams (2023)

**First Tee Greater Washington, DC**

Jonathan Wildes Memorial Scholarship for \$2,500

*2023*

**Tripoli Rocketry Association**

Level 1 High Power Certification

*2024*

## Skills

**Programming Languages/Tools:** Python, Java, HTML/CSS, GDScript, IntelliJ IDEA, WSL, GitHub Actions, SQL

**Languages:** English, Chinese (Intermediate)