Dylan Li

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Education

University of Michigan Aug. 2025 – Present
B.S.E. Computer Science and Engineering Physics *n/a GPA*

University of Michigan Aug. 2023 – Dec. 2024
High School Dual Enrollment *4.0 GPA*

Honors & Awards

MHacks Winner - Google Gemini Track *Sep. 2025*
Wharton Investment Competition Semifinalist (1% out of ∼5,000) *Jan. 2025*
National Merit Scholarship Finalist *Feb. 2025*

Experience

Lab Member May. 2025 - Present
University of Michigan *Ann Arbor, MI*

- Researching **Vim-style keybinds** and **action macros** in the Hazel editor to **improve developer efficiency**
- Enhanced Hazel editor usability through developing **new features** and **resolving long-standing bugs**
- Applied **type theory principles** to design and implement core functionality for onboarding project

STEM Summer Camp Instructor Jul. 2025 - Aug. 2025
The Future Innovators Academy *Ann Arbor, MI*

- Instructed children ages 5–13 in programming, Arduino, electronics, CAD, and graphic design, fostering both **technical skills** and **healthy personal habits** in an engaging learning environment

Engineering Captain Sep. 2021 - May. 2025
Pioneer High School FIRST Robotics Competition Team *Ann Arbor, MI*

- Directed a **70-person team** to design, build, and program three robots, **managing the entire engineering process**, coordinating cross-team collaboration, and ensuring timely project completion
- **Transformed software stack** by migrating from Python to Java, adopting functional programming practices, and improving odometry precision, computer vision reliability, and motion control accuracy
- Advanced team ranking from **40th percentile to 93rd percentile worldwide** in three years

Team Co-Founder Sep. 2023 - Apr. 2025
Wharton Youth Investment Competition *Ann Arbor, MI*

- Collaborated in a team of 7 to analyze multiple market sectors and trends, delivering a total of four reports for two competition clients and achieving semifinalist standing (**top 1% out of 5,000 teams worldwide**)
- Developed Python simulations to support investment strategy design and evaluated technical indicators' effectiveness through market data analysis

Projects

clAI - Command Line AI Sep. 2025

- Developed using Electron.js, React, and Python for MHacks 2025, **winning Best Use of Google Gemini track**
- Remote shell application that uses Google Gemini to simplify command line interaction, translating natural language to shell commands with support for extensive UI customizability and multiple shell instances
- Implemented **WebSocket communication** with backend to enable real-time interaction, developed **frontend features** to improve user's ease of use, **evaluated and iteratively tested** Gemini API outputs for consistency

Scrappy Shell May. 2025 - Jun. 2025

- Built a UNIX-style shell in C++ with **custom parsing and execution features**, replicating essential UNIX commands and operators within a functional shell environment
- Strengthened understanding of **operating system interaction** (UNIX commands, process management, file descriptors) and **interpreter design** (recursive descent parsing, lexing)

F1 Racing Game Feb. 2023 - Mar. 2023; Aug. 2025

- Developed a racing game in **Unity** with C#, featuring computer-controlled opponents and fast-paced gameplay
- Utilized Unity's reinforcement learning framework to **train AI models to race optimally** against other cars