

Hazel Levine

Curriculum vitae

EXPERIENCE

SEPTEMBER 2016 – PRESENT

FIRST Robotics Competition Team 868: TechHOUNDS
Environment administration & robot programming

Development and deployment of programs to FRC robots using the National Instruments roboRIO control system and the WPILibJ library. Creation of tools for long-term team sustainability such as Discord bots or the TechHOUNDS Wiki. Maintenance of a virtual machine housing the FRC development tools and environment.

AUGUST 2019 – PRESENT

AP Capstone Research

Computer vision-based failure analysis of 3D printers

Development and testing of a computer-vision based means of preventing catastrophic FDM 3D printer failure. Real-time comparison of a currently in-fabrication part to the source model and cancellation of running prints given an error is detected.

JULY 2019

Purdue University Office of Future Engineers

Seminar for Engineering Prospects

Program for prospective Honors Engineering students at Purdue University. Involved development and documentation of various mechanical and electrical projects, including rudimentary autonomous robotic systems. Individuals were put in groups of four to work with throughout the week, documenting their results and designs all the while.

SEPTEMBER 2018 – APRIL 2019

Eli Lilly

Engineering Explorers Post

Program for discovering different disciplines of engineering. Involved creation of various small projects to demonstrate each individual discipline. Designed to help a student settle on a career path.

JULY 2018

Hack Chicago

References for legal immigration to the United States

A rudimentary React app designed to catalog and document any and all resources for legal and safe immigration to the United States. Utilized a basic database to catalog and present relevant information/posts. Built over the course of 24 hours at TechNexus in Chicago. Now defunct.

📍 Available on request
📞 Available on request
✉️ rose.hazel@protonmail.ch
📧 qtp2t.club

EDUCATION

2016 – 2020 **Carmel High School**
4.03 (W) grade point average

PUBLIC PROJECTS

- 2019 **Self-lace (GitHub)**
Arduino-based self-tying shoe
- 2019 **Flick (FRC 868 GitHub)**
FRC 868's private Discord bot
- 2019 **Burnout's code (FRC 868 GitHub)**
A refactored, cleaner implementation of the code for FRC 868's 2019 Robot
- 2018 **very-nice (GitHub)**
An unfinished, rudimentary Scheme interpreter written in Haskell
- 2017 **Ratchet's code (FRC 868 GitHub)**
The code for FRC 868's 2017 robot, Ratchet
- 2016 **wmrc (GitHub)**
A simple window manager comprised of nothing but POSIX shell scripts
- 2016 **urc (GitHub)**
*A simple init system for UN*X systems*

COMMUNICATION SKILLS

ENGLISH Native language
HEBREW Written: fair – Oral: fair

SOFTWARE SKILLS

HIGH LEVEL Java, C, git, shell, Linux, AVR/Arduino
INTERMEDIATE Python, \LaTeX , JavaScript, Go, HTML/CSS, Scheme, FDM 3D printing, OpenBSD
BASIC LEVEL Windows, Haskell, C++, Rust, EAGLE, Autodesk Inventor, CNC milling

AWARDS

- 2019 **Commended**
National Merit Scholarship Corporation
- 2019 **AP Scholar With Distinction**
CollegeBoard
- 2019 **“Most Spirited Team”**
Purdue University: STEP
- 2019 **“Take the Initiative” Award**
FRC 868 End-of-year meeting
- 2019 **FRC 868: Winner**
Indiana District Championship
- 2019 **FRC 868: Winner**
Center Grove District Event
- 2018 **CLASS Award**
Presented by Sidney Swartzendruber
- 2018 **FRC 868: Winner**
FIRST Championship: Archimedes Division
- 2018 **FRC 868: Winner**
Indiana District Championship
- 2018 **FRC 868: Winner**
Tippecanoe District Event
- 2018 **FRC 868: Winner**
Plainfield District Event
- 2017 **FRC 868: Chairman’s Award**
Tippecanoe District Event

REFERENCES

- ZACHARY BONEWIT **FRC 868 head coach**
zbonewit@ccs.k12.in.us
- ALEXANDER RYKER **FRC 868 Programming/Electrical mentor**
acryker@gmail.com
- ALLISON MALLOY **Carmel High School AP Capstone Research teacher**
amalloy@ccs.k12.in.us
- DAVID JAMES **Carmel High School AP Physics 1/AP Physics C teacher**
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