Hayden Schroeder

Lake Saint Louis, MO 63367 (636) 357-1207 hschroeder0317@gmail.com
https://www.linkedin.com/in/hayden-schroeder/

Education

Class of 2025: Washington University in St. Louis

- Major: Computer Science GPA: 3.81
- Classes: Introduction to Systems Software; Reverse Engineering and Malware Analysis; Object-Oriented Software Development Laboratory; Introduction to Concurrent and Parallel Programming

Summa Cum Laude Graduate 2021: Lutheran High School of St. Charles County

- 4.07 GPA SAT Superscore: 1520 ACT: 33

Technical Experience

Electronics and Data Acquisition Lead - WashU Formula SAE *(Jul 2022-present)*

- Part of a team that designs and manufactures a race car then competes at Michigan Speedway
- As team lead, establish a project plan, including creating season timeline and milestones, delegating projects to members, and project documentation. Ended the 2023 season at 11th/120 at the Michigan FSAE competition
- Facilitate design and implementation of all electronics and software on the season's race car
- Design and manufacture multiple wire harnesses each year for ECU, data, and power
- Wrote C code for custom sensor boards, which packages sensor data into CAN frames and sends them to a central data acquisition board for processing and storage. Results in data capture from over 50 sensors on the car
- Wrote C code for custom control board, allowing precise driver control of DRS, e-clutch, and paddle shifting
- Built a Python script for cleaning and visualizing resulting CSV data enabling other team members to easily analyze car data and validate their designs
- Self-host an Xwiki server. Enables over 40 members to collaborate on a centralized documentation server

Intern - BH Tech *(May 2023-Aug 2023)*

- Developed custom interfaces and backend solutions to modernize company processes in SQL Server and Next.js

Information Security Intern - Washington University in St. Louis *(May 2022-present)*

- Research and report vulnerabilities in the network such as misconfigured file uploads and DNS zone transfer.
- Incident hunting and response using Corelight (Zeek) and Splunk. Discovered multiple malicious actors such as server backdoors and browser hijackers
- Pioneered implementation of Suricata IDS into WashU security infrastructure. Tested and tuned IDS for use at WashU. Documented results and presented to CISO for approval
- Enhanced and refactored python project that automates the manual task of viewing Tenable reports and sending them to the appropriate administrator

Back End Developer - Technology Partners *(Jan 2022-May 2022)*

- Entry level developer working on the TeamBot website backend (Java Spring Boot)

Software and Control Systems Lead - First Robotics Team 4329, Lutheran High School *(Aug 2017-Aug 2021)*

- Led project management and trained new software and control systems team members
- Integrated new technologies including low-light IR computer vision and PID control to the team
- Created first team 'coding etiquette', GitHub flow control, and Java curriculum

Accomplishments/Skills

- Proficient in Java, Python, C, and C++
- Proficient with the Linux operating system
- Experienced with Confluence, Jira, and Git

Hayden Schroeder

Community Involvement

Alpha Phi Omega - Active *(Feb 2022-present)*

- Participate in service projects such as planting flowers in Forest Park, picking up trash around campus, and volunteering at various charities

Missouri Boys State - City Counselor (Staff) *(Jun 2022-present)*

- Counseled and mentored about 30 young men in a one week leadership camp that takes in around 1000 high school juniors who work together to build their own state government
- Chosen by previous MBS staff to counsel these 30 citizens in a "city" structure
- Create connections by engaging with citizens and facilitate their week to change a lifetime

STEM Outreach *(2017-2021)*

- Hosted annual electronic Easter egg hunt for visually impaired children
- Roboteer Rumble - part of team that sponsored robotics competition for local teams
- LHS Robotics Expo - refereed robotics competitions to encourage middle and elementary schools to become more involved in STEM
- Mentored students in STEM camps throughout each year