

Harsh Aaryan

425-209-8017 | harsharyan4@gmail.com | github.com/Harsh-Aaryan | harshaaryan.tech

EDUCATION

Missouri University of Science & Technology

Bachelor of Science in Computer Science

Expected Graduation: Spring 2026

GPA: 3.7/4.0

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Python, C#, Java, C++, SQL, HTML5, CSS3, Assembly

Frontend: React, Vite, TypeScript, GraphQL, Recharts, Leaflet,

Backend & APIs: Node.js, FastAPI, .NET, REST APIs, WebSocket, API development

Databases & Cloud: PostgreSQL, SQL Server, Azure, AWS, Netlify, Render

DevOps & Tools: Git, Docker, Azure DevOps, CI/CD, Auth0, Agile, Scrum

EXPERIENCE

Lead Research Assistant

Aug 2025 – Present

Missouri University of Science & Technology

Rolla, MO

- Researched cybersecurity vulnerabilities in L2–L4 autonomous vehicle systems using luminescent materials to exploit sensor systems; analyzed attack vectors and developed countermeasures using Python machine learning algorithms
- Implemented ROS2/CARLA simulation testbeds to evaluate stability, scalability, and efficiency of distributed adversarial perception systems

Software Engineer Intern

May 2024 – July 2024

Prime Therapeutics

Remote

- Built full-stack internal video sharing platform with React frontend and Node.js backend; developed REST APIs and reusable UI components using JavaScript, HTML5, and CSS3
- Engineered data pipelines achieving sub-5 second video upload and retrieval; contributed to code reviews in an Agile/Scrum environment using Git

Front End Developer

Feb 2020 – May 2023

PeoplePerHour

Remote

- Delivered 200+ client web applications using HTML5, CSS3, and JavaScript; maintained a 95% client satisfaction rate through iterative design and strong communication

PROJECTS

HomeNode [PickHacks 26 Winner] | React, Vite, FastAPI, Python, Auth0, Leaflet

2026

- Built a mobile-first smart energy arbitrage platform combining household battery insights, local weather, and grid-intensity signals to convert homes into nano data centers
- Developed AI-assisted job scheduling with secure FastAPI backend (server-side API keys, fallback logic) and deployed a production stack on Netlify and Render
- Implemented modular data hooks and personalized controls (location, units, battery profile, automation) for real-time dashboards tracking energy impact and revenue

AutoTrader | Python, Alpaca API, Telegram Bot, Docker, AWS

2025

- Developed automated stock trading bot with real-time trading, position monitoring, and loop offset strategies; integrated Telegram bot with encrypted messaging and remote kill switch
- Implemented multi-threading for concurrent market data processing via WebSocket, Monte Carlo backtesting, and AWS Secrets Manager for secure API key management

Canvas-RPG [2nd Place, PickHacks 25] | React, Python, JavaScript, GraphQL

2025

- Built a Chrome extension and Progressive Web App converting Canvas LMS into an RPG-styled game using Canvas API for personalized quests; achieved 700+ downloads on Chrome Web Store

PUBLICATIONS

Stealthy and Passive Light-Based Speckle Attacks on Traffic Sign Recognition Systems

- *Under Review* — VehicleSec, USENIX 2026