

Oscar He

Software Developer and International Baccalaureate Student @ St. Robert CHS

<https://oscar-he.vercel.app/>

Experiences

Founder and Lead Full Stack Developer at [binmaster](#)

2021 - Present

- Front-end development for the project's website using next.js and deployed through Vercel
- Back-end development of REST APIs and websocket services for handling authentication, data collection, and analysis using Node.js, Rust, and Golang
- Automated builds and tests using CI/CD with Github Actions for ease of development and quality control

Founder, CEO, instructor, and developer at [CodeUp](#)

2024 - Present

- Overseeing operations and overall management of the org
- Develop website using next.js and deploy through Vercel
- Back-end development for CRM

Executive Member at St. Robert CHS' Coding Club

2023 - Present

- Prepare teaching materials for weekly meetings, and teaching club members various programming topics such as machine learning, competitive programming, and game development every week
- Help organize Coding Club events, including the annual school-wide coding competition

Developer for Rams Robotics

2022 - 2023

- Wrote programs as part of the programming team for FTC team 16488 in Java for the team robot
- Utilized A* pathfinding algorithms to get the robot from A to B while accounting for obstacles

Projects | <https://oscar-he.vercel.app/#projects>

[binmaster](#) | 2020 - Present | node.js, golang, rust, next.js, express.js, firebase storage, firestore, firebase authentication, playwright, CI/CD

Automation tool for the popular [Hypixel SkyBlock](#) gamemode

- Started this project in the summer of 2020 as a way to apply all the knowledge I had built up over the years into a project that I am passionate about
- Went commercial in the summer of 2021, and grew this project through various means such as advertising and partnerships over the years to a user base of over **5,700**, with over **3,200** recorded sales
- Resulted in the development of various other sub-projects, such as LoaderJS, Skyblock-Pricing, and

[Simple TOTP](#) | 2024 - present | rust, react.js, tauri, cryptography, CI/CD

A feature-rich cross-platform TOTP manager with a clean user interface built with Tauri. The successor to totp-cli

- Created this tool in response to Twilio sunsetting the Authy desktop app to offer a free, open-source alternative. Uses Tauri to provide users with a much smoother desktop experience than Authy

[File Uploader](#) | 2023 | golang, html, css, js, gin

A file manager with a backend written in Go and a clean frontend written in html and javascript

- Created this tool to learn more about golang as well as learn new techniques for efficient data transferring, such as buffering

Education & Awards

- Waterloo's Cayley Math Contest Group Honour Roll (#266 of 17998 contestants) | 2024
- Waterloo's Canadian Computing Contest Senior Distinction (#773 of 3947 contestants) | 2024
- Waterloo's Canadian Intermediate Math Contest Honour Roll (#249 of 14560 contestants) | 2023
- Waterloo's Canadian Computing Contest Junior Perfect Score (#1 of 6242 contestants) | 2023
- Royal Conservatory of Music Level 8 Piano (Theory and Technical) with First-Class Honors | 2023

Skills | <https://oscar-he.vercel.app/#about>

Programming Languages: JavaScript/Typescript, Python, Golang, Rust, Java, Bash, Shell, HTML, CSS

DevOps Tools: Linux, Docker, Cloudflare, Github Actions

DevTools & Frameworks: Git, Vercel, Heroku, GCP, AWS, JetBrains IDEs, VSCode, Express, Gin, Warp,

Firebase, WS, Tailwind, Next.js, React.js, shadCN, daisyUI Framer Motion

Productivity and Design: Obsidian, Canva, LaTeX, Excel, World, PowerPoint