

# ZUOMIAO (ZONA) HU

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[linkedin.com/in/zonahu/](https://www.linkedin.com/in/zonahu/) | [github.com/ZonaHu](https://github.com/ZonaHu)

## SKILLS

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**Languages:** JavaScript, C++, C, Python, Java, SQL, Bash, HTML, CSS

**Technologies:** React.js, Firebase, Google Cloud, Linux, Git, Vim, Raspberry Pi, Photoshop

## PROJECTS

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**OpenTM Event Finder Project** ([devpost.com/software/study-mates](https://devpost.com/software/study-mates)) *Jan 2020 - Present*

- Created an event finder in **StarterHack 2020** in a team of 4 using **React.js**, **Firebase**, **Google Map API**, **JavaScript** and **HTML**
- Resolved issues related to asynchronous **JavaScript** utilizing **async/await** functions
- Deployed a web application on **Google Firebase**, and managed a **No-SQL** database on **Google Cloud**

**Crowdedness Monitor** ([github.com/ZonaHu/crowdedness-monitor](https://github.com/ZonaHu/crowdedness-monitor)) *Sep 2019 - Dec 2019*

- Developed a crowdedness monitor using **Python** and **Raspberry Pi** to measure real-time crowdedness in public places
- Monitored the packets transmitted by Wi-Fi devices in the **IEEE 802.11** data link layer and obtained their unique MAC addresses; deployed 2 devices in 2 libraries
- Worked on the backend features such as time localization and input sanitization
- Wrote a project proposal, final report and presented to the Software Engineering Cohort

**LEGO EV3 Robotics Design Project** ([github.com/HITGIF/LEGO-iBASE](https://github.com/HITGIF/LEGO-iBASE)) *Jul 2019 - Aug 2019*

- Designed and built a robot from LEGO pieces and sensors to complete multiple missions, and programmed with **LEGO Mindstorms EV3 software**
- Collaborated with 2 team members on troubleshooting and participated in LEGO EV3 Robotics **Hydro Dynamics Challenge**

## EXPERIENCE

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**WATonomous (University of Waterloo Autonomous Vehicle Design Team)** *Jan 2020 - Present*  
*Core Member* *Waterloo, ON*

- Design and develop the UI design of the team website to improve responsiveness and mobile-friendliness
- Brainstorm and redesign promotional materials, swag, and car wraps

**Highroad Academy Math Club** *Sep 2018 - Jun 2019*  
*Founder & President* *Chilliwack, BC*

- Founded **the first math club** at Highroad Academy, promoted the club by **designing posters** and **giving speeches**, and planned various events
- Tutored over **20** classmates and coached **4** students to achieve **Top 25% over Canada** in the math contests such as the Euclid Contest and Canadian Senior Mathematics Contest, which were held by the University of Waterloo

## HONORS & AWARDS

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- University of Waterloo Presidents Scholarship of Distinction *Sep 2019*
- University of Toronto Girls in Engineering Exploration Event Travel Award *Apr 2019*
- Contests with distinctions in all: Euclid, Cayley, Fermat, CSMC, Michael Smith Challenge, BC Secondary Mathematics Contest, Zhejiang Adolescents Science & Technology Innovation Contest Intelligent Robotics Group *2017-2019*

## EDUCATION

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**University of Waterloo** *Sep 2019 - May 2024*  
*Candidate for Bachelor of Software Engineering* *Waterloo, ON*