ZHEHAI ZHANG

A student dedicated to making an impact in the tech industry.

Contact

✉ zhehai@zhehaizhang.com

📞 (226) - 280 - 8525

🌐 zhehaizhang.com

⬡ github.com/fairnightzz

in linkedin.com/in/zhehai

Ⓓ devpost.com/fairnightzz

Skills

Languages:
C, C#, C++, Java, JavaScript, HTML/CSS, PHP, Python, LaTeX, SQL, GraphQL

Frameworks:
Node.js, Vue.js, Nuxt.js, Unity, React.js, Vuetify, Tailwind CSS

Tools:
Git, Docker, Linux Administration, Cloudflare, NGINX, Adobe CC, Firebase, PostgreSQL, VR, AR

Hardware:
Arduino, Kinect 360, LeapMotion, Windows Mixed Reality/Vive Headset

Soft Skills:
Management/Leadership, Research/Analyze, Teaching, Teamwork/Collaboration

Education

University of Waterloo

Bachelor's of Computer Science Digital Hardware Specialization
Expected Graduation: 2025
GPA: 3.99
Relevant courses:
- Elementary Algorithm Design and Data Abstraction (Advanced Version)
- Designing Functional Programs (Advanced Version)

Projects

DiscourseVR - Remote Debate Analyser   *April 2021*
- Developed a remote solution for feedback/recording of virtual parliamentary debates
- Used Mirror, Networking Dissonance, and Networked Sound RockVR along with the **Mixed Reality Headset** for the **VR** experience, and deployed a webapp using **Tailwind CSS** and **Nuxt.js** to display debate recordings and live feedback chat

9it - Version Control System Command Line Interface   *February 2021*
- Implemented Git from scratch in **C** and packaged for Linux distros such as **Debian/Arch**
- Actualized internal features such as staging, commits, reverts, and hash tree structure

SubSpace - HackTheNorth 2020 ++   *January 2021*
- Won the **finalist award**, placing top 24 out of 3000+ participants
- Developed a way to remotely deploy and share virtual machines with coworkers
- Used **Node.js**, **NoVNC** for live collaboration and combined **Nuxt.js/Vuetify** for frontend

Teleclinic - Online Medical Clinic   *September 2020*
- A convenient web application to schedule medical appointments, enter queues for walk-in appointments, and connect with doctors through Zoom
- Used **Node.js** and **PostgresSQL** to handle backend logic and queries (REST API) and leveraged **Vue.js** and **Zoom API** for user interface and video calling

ARitus - MIT Reality Virtually Hackathon   *February 2019*
- Developed a rehabilitation tool using the **HTC Vive Pro Headset** which helps people with arthritis regain mobility using augmented reality exercises
- Implemented hand-tracking using **LeapMotion Orion** and **Unity**

Experience

CodeReach Program - Teacher   *2018-2019*
- Taught a class of elementary school students about the basics of **Python** and **Pygame**
- Prepared in depth lessons, exercises, and designed laptop stickers for the students

MasseyHacks VI - Hackathon Executive   *2019-2020*
- Managed logistics behind workshop livestreams for the 200+ person event

Computer Science Club - Junior Leader   *2019-2020*
- Taught competitive programming techniques and algorithms to high school students
- Organized programming competitions on **self-hosted** online judge with 50+ users

Canadian Young Physicist's Tournament - Bronze Medalist   *March 2020*
- Used **numpy**, **matplotlib** and **panda** to interpret 10 challenging physics problems
- Researched and developed computer simulations in **MATLAB** and **Anylogic** involving aerodynamics, fluid dynamics, and magnetism

Chess Club - Leader   *2017-2020*
- Organized official tournaments of 20+ people for the Ontario Chess Championships
- Lead the school team to win the Ontario HS Chess Tournament 2 years in a row

Awards

René Descartes National Scholarship
- 2nd highest Math Scholarship valued at $20 000, awarded to 15 distinguished students

Loran Scholar's Foundation Semi-Finalist
- Selected from 5194 applicants based on evidence of character, service, and leadership

Canadian Computing Competition Senior
- Placed Top 8% out of 2700 students nationally