Aidan Huang

EDUCATION

Bachelor of Science, Software Engineering　　　*Expected April 2027 (including internship)*
Schulich School of Engineering, University of Calgary　　　Cumulative GPA: 3.6
Last Semester: 3.9

SKILLS

- **Technical:** Extensive experience using C, C++, Python, Java, JavaScript, CSS, Node.js, React, RISC-V Assembly, TypeScript, Shell, and SQL.

- **Communication:** Strong communicator with the ability for quickly learning and can simplify technical concepts for non-experts.

- **Leadership:** Experience in leading **teams of 4-6** on academic and personal projects, with excellent multitasking and time management skills.

ACADEMIC PROJECTS

SmartServe AI Meal Planning Web App (Next.js, Spring Boot, SQL, TypeScript, TailwindCSS, etc)
- Developed a full-stack AI meal planning app in a **team of 6**, using **Gemini AI** to generate personalized plans.
- Built a responsive frontend with **Next.js**, **TailwindCSS**, and reusable React components.
- Designed backend services for user authentication, email notifications and data handling.
- Applied **SOLID principles** for scalable backend architecture.
- Deployed on Vercel (frontend) and Railway (backend) with **CI/CD pipelines** and environment configs.

Chess Game Application (JavaScript)
- Co-developed a chess game **in a team of 2**, leading game logic design and rule enforcement.
- Utilized GitHub for version control with branching and merge requests for smooth collaboration.

Synopsis Programming Contest 2023 (Python, C++, Java)
- Placed **4th place** in a coding competition focused on solving complex programming problems.
- Enhanced coding skills, mathematical problem-solving, and pair programming skills.

Code The Change 2023 (Tailwind, Python, React, etc.)
- Collaborated in **a team of 5** to address a real-world environmental issue.
- Improved reading coding documentation, learning new languages, and problem-solving.
- Developed a solution to reduce improper garbage disposal.
- Utilized Machine Learning, AI, and motion detection to identify items being held.
- Assisted in creating an app for University of Calgary students to support recycling efforts.

Portable Handheld Gaming Device (C**)**
- Created a retro snake game as part of a **4-person team**.
- Designed casing, and coded **50% of the game logic**, **buttons, and interactions**.
- Wired the Arduino kit to the display and assembled the casing.

Chess Game Application (Java)
- Developed a full-featured chess application, focused on object-oriented design and game logic.
- Responsible for game logic, user interface, and graphic design.
- **Implemented core game mechanics** such as legal move validation, capturing, castling, En passant, and pawn promotion, ensuring adherence to chess rules.
- **Designed and integrated an interactive user interface** for the game, allowing players to visualize the board, move pieces, and receive feedback on illegal moves.
- **Utilized efficient algorithms** to check for special game states such as check, checkmate, and stalemate.