Sean Wang

(226) 792-6402 • Waterloo, ON • s322wang@uwaterloo.ca • GitHub • LinkedIn • Devpost

SKILLS

Programming Languages: Python, Java, C++, C#, HTML, CSS, Tailwind CSS, JavaScript, TypeScript
Technologies: Git, SVN, .NET Framework VSCode, Figma, React.js, Next.js, OOP, React Native, PyTorch (Machine Learning)
Other Skills: Agile Development, Visual Basic for Applications, UI/UX Design

EXPERIENCE

Software Developer Co-op   Jan. 2024 - April 2024
Lockheed Martin | Halifax, NS
- Made changes to the ship's **Java** codebase according to document specifications, such as **object properties, methods, data structures, and function logic**, while maintaining compatibility of interacting components within different files
- Implemented and presented **Python / VBA** automation solution for populating Word tables from Excel data with automatic format conversion **turning hours of work to only seconds**; commended for effectiveness of solution
- Created an automatically updating Gantt chart program schedule using **Tableau and Visual Query Language** featuring colour-coded bars, shapes, and a legend, **saving 2 - 3 hours** of would-be manual efforts for schedule creation
- Performed software derivation requirement reviews in the database to ensure parent / child links are compliant

Frontend Developer Internship   Dec. 2022 - Aug. 2023
Paybridge Technologies | Remote | Website Link
- Used **CSS, React, and Next.js** to revamp certain parts of the landing page; **commended on multiple occasions for effective design and bug fixing in a timely manner**
- Perfected the **user experience and interface** of the transaction page form after 3 design iterations based on feedback
- Implemented **field validation** and error messages in the user form using **JavaScript** and ensured data is saved in a JSON format to be sent to the backend
- Promoted the use of Notion task boards and improved task management system efficiency by 20%

Research Assistant   March 2023 - June 2023
University of Waterloo | Waterloo, ON
- Explored various AI models to develop a **human-computer interaction system** for swarm robots (10 table robots)
- Trained a neural network for gesture recognition using the PyTorch Python library with an **above 90% accuracy score**

PROJECTS

SignSpeak - uOttaHack 5 Winner (**First Place Overall Winner, 200+ participants**) | Devpost; GitHub
- Developed bite-sized sign language lessons and quizzes using **JavaScript, React, Next.js,** and a TensorFlow classification model making sign language education more accessible
- Utilized React's **component-based architecture** to modularize code and **facilitate easier maintenance** and future scalability of the application.
- **Worked effectively under pressure** in a team of 4 utilizing everyone's strengths; successfully pitched to judges and won **first-place overall prize**

A Helping Hand - JamHacks 7 Winner (**Best Hardware Hack, 136 participants**) | Devpost; GitHub

- Combined each team member's expertise to build a gesture-controlled robotic hand using Arduino and computer vision
- Programmed the **Arduino** and computer connection using **C++ and Python** and **assembled the breadboard circuit**

EDUCATION

University of Waterloo | Bachelor of Applied Science in Computer Engineering   2023 - 2028
- **Scholarships**: President's Schol/Distinction; Adel S. Sedra Scholarship
- **Involvement**: S4 Cohort Engineering Society Representative