ELBERT CHAO

CANADIAN CITIZEN

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EDUCATION

Bachelor of Engineering Science, Software Engineering   London, ON, Canada
University of Western Ontario   *Sept 2021 – May 2025*
- CGPA: 3.7/4.0; Deans Honor List: 2021-2024
- Coursework: Cloud Computing, Software Testing and Maintenance, Web Technologies, Introduction to Machine Learning, Artificial Intelligence, Data Structure & Algorithms, Database Management, Operating Systems

WORK EXPERIENCE

Free Appropriate Sustainability Technology - FAST   London, ON, Canada
Undergraduate Assistant   *Nov 2024 – Present*
- Developing a web interface using Next.js to help farmers interact and monitor the ripeness of strawberries through AI-driven segmentation
- Integrating the front end with a Python backend implemented in Flask, enabling real-time data processing
- Collaborating with AI researchers to align web application functionality with segmentation model outputs

PepsiCo – Frito-Lay   Toronto, ON, Canada
Warehouse Technician   *May 2023 – Aug 2023*
- Executed warehouse operations such as picking and packing resulting in a 15% increase in order fulfillment rate
- Orchestrated coordination among warehouse personnel, contributing to a 10% reduction in inventory processing time
- Regularly undertook additional responsibilities beyond the required duties, alleviating the company's overall workload

PROJECTS

Cheer Program 🌐 | *MongoDB, ExpressJS, ReactJS, NodeJS, Material UI, Socket.io, GCP*   *Jan 2024 – May 2024*
- Designed simplistic navigation & chatroom system leveraging UI, ReactJS, and Socket.io to improve user experience
- Collaborated with a team of 5 using Jira and Confluence to maximize project workflows
- Delivered the web application on GCP using Cloud Run to enhance scalability and resource management

Chatroom Whisperers 🎧 | *C++, Python, PyQt, AWS*   *Jan 2024 – May 2024*
- Coded a real-time chatroom application, using C++ and Python, to provide a platform for users to engage in conversations, resulting in a 30% increase in user engagement and improving user experience
- Managed a server hosted on AWS service, leading to a 35% improvement in connection times

Pygame Pirates 🎧 | **Video Demo** ▶ | *Python, Pygame*   *Jan 2023 – May 2023*
- Coded 10+ Python scripts with Pygame, enhancing gameplay depth and player interaction
- Formulated an intuitive player shop interface, enabling users to pause the game and upgrade character abilities
- Created fluid animations, 3 different scenic maps and monsters improving visual dynamics and reducing frame delays

COMPETITIVE ACHIEVEMENTS

Western Engineering Competition 🏆 | **Game Demo** ▶ | 2nd Place Programming Winner   London, ON, Canada
Software Developer   *Nov 2024*
- Programmed a Space Asteroid Game using Pygame, competing against 500+ participants across 10 categories
- Completed a functional game with a team of 4 under a 7-hour time constraint, demonstrating effective teamwork
- Delivered a final presentation to judges using MS PowerPoint, highlighting architecture and technical features

Western Cyber Society (WCS) 🏅 | 1st Place Entertainment Category Winner   London, ON, Canada
Backend Developer, SIP Spotify Playlist Generator Team   *Jan 2024 – Apr 2024*
- Developed a model using Python, Spotify's API, and OpenAI API to create personalized playlists for users, increasing listening retention
- Facilitated weekly meetings with a team of 6 to strategize the successive phases of the software development
- Presented our project at the Toronto Tech Expo, competing with 15+ innovative software integration teams

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, HTML/CSS, SQL, C/C++
Databases: MongoDB, MySQL
Web Technologies: ReactJS, NodeJS, ExpressJS
Cloud Developer Tools: GCP, AWS
Technologies/Frameworks: GitHub Actions, Docker