Erin Zhou

647-639-1997 | erincc.zhou@mail.utoronto.ca | linkedin.com/in/ErinCCZhou | github.com/enCCzu

Education

Bachelor of Applied Science | Computer Engineering

09/2022 - 04/2027 (Expected)

University of Toronto

- Intended Minor: Artificial Intelligence
- Relevant Courses: Applied Fundamentals of Deep Learning (AI/ML, Python), Software Design and Communication (C++), Computer Organization (Assembly, C), Engineering Strategies & Practices

Skills

Programming: C, C++, Java, Python, Verilog, Assembly

Web Development: HTML, CSS, Next.js

Libraries & Frameworks: PyTorch, TensorFlow, Keras, Pandas, NumPy, Scikit-learn, Matplotlib, OpenCV

Graphic Design & Content Creation: Canva, Figma, Adobe Photoshop, Adobe Illustrator

Software & Tools: Excel, Google Sheets, Git, Jupyter Notebooks

Projects

Automated License Plate Recognition System | Python, Machine Learning

05/2024 - 04/2024

Applied Fundamentals of Deep Learning Course Project

- Collaborated in a team project of 4 students, utilizing advanced deep learning frameworks and traditional machine learning techniques.
- Implemented and integrated Faster R-CNN, YOLOv8, and ResNet-101 to achieve high accuracy in license plate detection and recognition with precision and recall of 92% on new data.

Trailblazer Mapping Software | C++

01/2024 - 04/2024

Software Design and Communication Course Project

- Designed and developed a mapping software application with UX design principles in a team using Glade, EZGL, and GTK featuring Dijkstra and A* path-finding algorithms to provide efficient navigation.
- Integrated OpenStreetMap data to populate the map with detailed geographic information, enabling features such as hiking and cycling paths, hotels, restaurants, and other points of interest.
- Conducted extensive testing to achieve high scores in accuracy of route calculations, speed, and reliability.

Cat-atouille Escape Game | C, Assembly

01/2022 - 04/2022

Computer Organization Course Project

• Developed a game that interfaces with the DE1-SoC board with complex hardware-software integration, real-time controls, and rich multimedia features, demonstrating strong proficiency in low-level programming and embedded systems.

Engineers Without Borders - Community Garden Container Design | Team Leader

01/2022 - 04/2022

Engineering Strategies & Practices Course Project

- Spearheaded a client proposal project with a team of 6 students, overseeing the research, design, and prototyping of a campus garden bed aimed at expanding green spaces.
- Led team meetings, delegated tasks, and utilized project management to ensure quality deliverables.
- Received enthusiastic acclaim from the client and engineering managers for the innovative design.

Experience

Junior Programmer | HTML, CSS

02/2021 - 06/2021

bizZone Inc.

- · Optimized code for responsive web design to ensure ease of use across different devices.
- Conducted thorough testing to identify and resolve errors in web design, improving website performance and user experience for client projects.