William Edwardo Gunawan

william.gunawan@torontomu.ca • wiledw.com • linkedin.com/in/william-gunawan/ • github.com/wiledw

EDUCATION

Toronto Metropolitan University | Toronto, ON Expected Graduation May 2025

Bachelor of Science in Computer Science GPA:3.74

Coursework: Data Structures, Algorithms, Databases, Programming Languages, Data Science, Artificial Intelligence(AI), Machine Learning, Web Design and Development, Software Engineering, Computer Architecture, Operating System, Computer Security

SKILLS & TECHNICAL TOOLS

Languages: Python, Java, C, C++, HTML, CSS, JavaScript, Prolog, Bash, SQL

Technologies: Git, Node.js, Express.js, React.js, MongoDB, Oracle, Postman, numpy, scikit-learn, pandas, matplotlib, TensorFlow

Interests: Full-Stack Development, Software Engineer, Data Analyst, Data Science, Machine Learning, Artificial Intelligence

EXPERIENCE

Software Engineering Intern | Esportium *May 2024 - Present*

Full-Stack Developer | Cove *May 2023 - Aug. 2023*

- Developed web applications and components using a modern technology stack, including JavaScript, React.js, Node.js, Express.js, and MongoDB, to deliver high-performance loading time, and an improved user experience.
- Led the design and development of the Discord REST API using Node.js and Discord.js, enhancing the platform's capabilities and integrations. This involved architecting robust API endpoints and optimizing data retrieval, resulting in a **25%** increase in data processing speed and a **20%** reduction in API response time.
- Collaborated in an Agile environment and worked closely with cross-functional teams of talented developers to create innovative, high-quality products that exceeded client expectations. This teamwork fostered a dynamic and creative development environment, leading to successful project outcomes and customer satisfaction.
- Actively engaged in code reviews, offering constructive feedback and mentorship to fellow developers, contributing to the team's growth and the establishment of best practices for code quality and consistency.

PROJECTS

SageAI (GenAI Genesis Hackathon Winner) | Python, Node.js, Express.js, React.js, MongoDB, Vertex AI, PyTorch

- Collaborated in a team of four to develop SageAI, an online web application platform designed to make healthcare diagnostics faster, more accurate in early disease detection, and increasing healthcare affordability.
- Integrated Google-BERT for textual symptom analysis and incorporated Google Imagen via Vertex AI for converting user-uploaded images into textual descriptions. This innovative approach allowed for comprehensive symptom analysis, achieving over **90%** diagnostic accuracy across 41 unique diseases.
- Employed BiomedCLIP for scan type identification, directing scan results to the ResNet-152 model for disease diagnosis, reaching an accuracy of **87%**.

Heart Failure - Machine Learning Research | Python, Pandas, Numpy, Matplotlib, Scikit-learn, K-modes, Seaborn

- Leverage Python for data preprocessing, outlier removal, hyperparameter tuning and K-Prototypes clustering algorithm.
- To ensure robust and unbiased cluster formation, the elbow method was used for optimal cluster determination, leading to the identification of relevant patient subgroups with over **90%** clustering accuracy.
- Contribute to the development of healthcare models, significantly improving patient care and reducing healthcare costs.

Buyyit | HTML, CSS, JavaScript, Node.js, Express.js, React.js, MongoDB, Jwt Authentication, Socket.io

- Led a group of 4 in the creation of a responsive classified ads platform for TMU students, featuring secure user authentication, a mobile-optimized interface, and an intuitive ad posting system.
- Implemented advanced search functionality, a secure communication platform, and an admin dashboard to facilitate easy management of ads and user interactions.

Rent-A-Ryde | HTML, CSS, JavaScript, Node.js, Express.js, SQL

- Designed and developed a Car Rental Service System with a visually engaging and intuitive user interface.
- Developed RESTful API endpoints and optimized complex SQL queries, resulting in a **25%** improvement in data retrieval and loading speeds, significantly enhancing system efficiency.
- Revolutionized rental operations by designing a comprehensive Oracle database, streamlining processes and contributing to a **90%** increase in customer satisfaction through improved service delivery and operational efficiency.

AthletX | Java, JavaFX, Oracle Database

- Collaborated in a team of 6 to develop an Online Department Shopping System with a visually engaging user interface.
- Utilized JavaFX for the front-end development and Java for the back-end development, seamlessly integrating the two components to create a robust, user-friendly system.
- Employed a spiral model and Gantt chart for efficient project planning and management, increasing team productivity by **85%**.