# William Edwardo Gunawan

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### **EDUCATION**

### Toronto Metropolitan University | Toronto, ON

Bachelor of Science in Computer Science

Expected Graduation June 2025 GPA:3.66

#### **EXPERIENCES**

### Software Engineering | FinChat

May 2025 - Present

### AI Engineer | Outlier (Freelance)

March 2025 - Present

- Designed, developed, and optimized prompts to enhance the accuracy and reliability of AI models. Achieved a 27% higher accuracy from the AI LLM models.
- Collaborated with AI researchers to refine prompts, resulting in a 15% increase in model reliability and improvement.

## Software Engineering Intern | MedPass

Feb 2025 - Present

Collaborate with project management, digital marketing, and design on creating figma designs and responsive web applications

#### Software Engineering Intern | Esportium

May 2024 - Aug. 2024

- Participate in designing and developing a scalable full stack program using C#, ASP.NET, Typescript, React.js, and AWS RDS for storage, achieving a 25% faster loading times and an improved user experience.
- Designed and implemented a RESTful API to facilitate front-end to back-end communication, improved application performance by 30% and reduced average response time by 50%.
- Designed and developed unit testing for controllers and services using Moq and XUnit, improving code coverage by 70%.

#### Full-Stack Developer Intern | Cove

May 2023 - Aug. 2023

- Contributed to the design and development of a scalable full-stack application using **React.js** for the frontend and **Node.js** for the backend, ensuring seamless performance and maintainability.
- Collaborated with cross-functional teams to integrate testing strategies into the CI/CD pipeline, reducing deployment times by 50% and minimized production issues by 20%.
- Set up and maintained MongoDB database for storage, retrieval, and manipulation of data, leading to improved data accessibility.

## Software Engineer Intern | PT. Rapier Technology International

Jan 2020 - Apr. 2022

- Developed and maintained RESTful APIs using Flask and designed frontend components with React.js.
- Integrated AWS S3 storage for scalable and reliable file management, leveraging pre signed URLs to enhance security.
- Designed and set up a CI/CD pipeline with GitHub Actions, automating unit testing and linter checks, improving code quality, minimizing production issues by 25% and increasing deployment efficiency by 40%.

#### **PROJECTS**

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

- Managing a team of four to develop SageAI, leveraging the MERN framework to build an online web application platform designed
  to make healthcare diagnostics faster, more accurate in early disease detection, and increasing healthcare affordability.
- Developed an AI diagnostic tool by integrating **BERT** for textual symptom analysis, **Google Imagen** via **Vertex AI** for converting user-uploaded images into textual description, achieving over **90% diagnostic accuracy** across **41 unique diseases**.

TrashCam (HackTheValley 9 Hackathon Winner) | Next.js, TypeScript, PostgreSQL, Google Vision, Tensorflow, Gemini, OAuth

- Led development of a real-time waste sorting web-application using **Next.js** and **TypeScript**, increasing sorting accuracy by **85%** through AI-powered object recognition (**Google Cloud Vision & COCO-SSD**).
- Integrate Gemini LLM for waste classification, boosting sorting speed by 30% and reducing contamination in recycling streams.
- Optimized data management using **PostgreSQL**, enabling reliable access to over **1,000** user records with fast, scalable performance.

ALI (Hack49 Hackathon Winner) | React Native, FastAPI, Python, Wave2Vec, Gemini, , Langehain, PyTorch, AWS S3

- Developed an AI-powered mobile app that monitors early signs of Alzheimer's by analyzing speech patterns to reduce diagnostic errors and provide continuous cognitive health insights, resulting in improved early intervention and support for elderly users.
- Implemented a custom multiheaded-attention classifier integrated with Wave2Vec to continuously analyze speech for signs of cognitive decline, achieving a 90% accuracy rate in early detection, leading to proactive cognitive health alerts.

EcoFind | Next.js, TypeScript, AWS, Supabase, Node.js, Python, OpenAI

- Designed and developed a serverless architecture using **AWS** services such as **Cognito**, **API Gateway**, **Lambda**, and **DynamoDB**, resulting in a 40% reduction in infrastructure costs and a 30% increase in application performance.
- Integrated **Google Maps API** and browser-based **geolocation** services, enabling users to locate nearby 3D waste recycling facilities with **95%** accuracy, displaying distance and time estimates from the user's address to the nearest facility.
- Developed a custom LangChain AI chatbot using OpenAI's model, integrated with Supabase to store comprehensive Ecofind
  documentation, providing real-time support and detailed information on the application's features, functionality, and sustainability.

# **TECHNICAL SKILLS**

Languages: Python, Java, JavaScript, TypeScript, C++, C#, HTML5, CSS, SQL, Bash

**Developer Tools:** Git, Github, Docker, Redis, Apache, AWS, Azure, Google Cloud Platform, Postman, Linux, Bash, VS Code, Jira **Databases:** MongoDB, PostgreSQL, MySQL, Oracle, Supabase

Libraries/Framework: Next.js, Node.js, Express.js, React.js, React Native, Material-UI, ASP.NET, FastAPI, Django, TensorFlow, PyTorch, LangChain, Pandas, Websockets, OAuth, Auth0, Spring Boot, Agile