

DURGHAASHINI S RAGUNATHAN

Computer Science Undergraduate | Software Development | Full-Stack Development | Artificial Intelligence

012-6940710 | durghaa01@gmail.com | Ipoh, Perak, Malaysia

GitHub: github.com/Durghaa01 | LinkedIn: [linkedin.com/in/durghaashini-s-ragunathan](https://www.linkedin.com/in/durghaashini-s-ragunathan) | Portfolio: durghaa01.github.io

PROFESSIONAL PROFILE

Computer Science undergraduate at UCSI University with practical experience across full-stack software development, AI-focused systems, database-driven applications, academic research, and real-world client work. Developed a custom Django-based loan management system for a business client, with prior IT support experience at Lembaga Air Perak, leadership experience in a national student hackathon, and a published research contribution in artificial intelligence. Interested in building reliable software and intelligent systems that translate technical capabilities into practical applications.

CAREER OBJECTIVE

To build a career in software development, full-stack engineering, or AI-related technology roles where I can apply strong programming, database, system-design, and problem-solving skills while continuing to grow through real-world engineering challenges, collaborative development, and emerging intelligent technologies.

RESEARCH INTERESTS

- Artificial intelligence and intelligent systems
- Applied AI for practical software applications
- AI-assisted personalization and user engagement
- Computer vision and image recognition
- Database systems and data-driven applications
- Human-centred software and digital wellbeing technologies

EDUCATION

Bachelor of Computer Science (Honours)

UCSI University, Kuala Lumpur | Aug 2024 - Expected 2027

- Current CGPA: 3.54; Dean's List recognition.
- Coursework and projects include software development, data structures and algorithms, research methods in computing, application-layer programming, web programming, intelligent systems, databases, and AI-related development.

Foundation Studies - Engineering and Science Stream

Curtin University Malaysia | 2022

Diploma in Information Technology (Digital Technology)

Politeknik Balik Pulau | 2019 - 2022

- CGPA: 3.58; Dean's List; recipient of Pingat Ketua Jabatan.
- Diploma Final Year Project: Log Reporting System, developed as a pair project using Lembaga Air Perak as an academic case study.

PROFESSIONAL EXPERIENCE

Freelance Full-Stack Developer

Custom Loan Management Web Application | Dec 2025 - 2026

- Developed a custom Django-based loan management web application for a real business client, centralizing customer, loan, agreement, payment, ledger, receipt, reporting, document-generation, and staff-access workflows.
- Translated client requirements and manual business processes into structured application workflows, authentication controls, role-based permissions, and reporting functionality.
- Built and integrated features using Python, Django, HTML, CSS, JavaScript, SQLite, document-generation libraries, and supporting web technologies.
- Managed requirements gathering, system design, implementation, testing, client communication, and delivery preparation independently.

IT Intern - Information Technology Unit

Lembaga Air Perak, Ipoh | Sep 2021 - Feb 2022

- Provided technical troubleshooting and support for employee computers, software, printers, and network-related issues.
- Assisted with workstation setup, system configuration, backups, and IT equipment checks as part of day-to-day IT operations.
- Gained exposure to organizational systems including Oracle/Water Billing System, MyLAPApps, and HRMIS.

RESEARCH EXPERIENCE & PUBLICATION

AI-Driven Gamification for Personalized Wellbeing Monitoring in Mental Health Applications

Bachelor's Final Year Project

- Developed an individual FYP module within a larger collaborative university mental-health application, focusing on mood-based interaction, gamified wellbeing activities, rewards, progress tracking, behavioral interaction, and AI-assisted personalized feedback.
- Worked with Flutter/Dart, Python/FastAPI services, PostgreSQL, REST APIs, and AI/ML service integration.
- Applied mixed-method evaluation concepts and User Acceptance Testing to assess usability and user engagement within the prototype.

Published Research

M. Alias, D. Saidi, L. Jia Huey, L. Qing Fang, D. S. Ragunathan, J. Ng Poh Soon, and P. Koo Yuen, “Artificial intelligence-powered image recognition retail checkout systems,” *International Journal of Advances in Applied Sciences*, vol. 15, no. 1, pp. 187–197, 2026. doi: 10.11591/ijaas.v15.i1.pp187-197.

SELECTED SOFTWARE PROJECTS

DevBoost - AI-Powered Developer Productivity Platform

Future Ready Hackathon 2025 | Team Lead

- Led a three-member student team developing a prototype that combined repository management, documentation generation, AI-assisted test creation, task collaboration, and activity tracking.
- Worked with React, Python/Flask, SQLite, GitHub API, and OpenAI API within a time-constrained hackathon environment.

UCSI Road Damage Reporting System

Web Programming Group Project | Frontend Logic Developer

- Developed the interactive user dashboard, hazard submission forms, client-side validation, dynamic JavaScript modals, multi-photo upload preview logic, and user-side report tracking interface.
- Collaborated in a four-member team using PHP, JavaScript, MySQL/MariaDB, Leaflet.js, and OpenStreetMap.

Log Reporting System

Diploma Final Year Project | Pair Project

- Developed a VB.NET Windows Forms desktop application backed by Microsoft SQL Server for administrator/staff authentication, staff registration and management, log-report submission, image evidence, search/filtering, report viewing, and print/save-related functionality.
- Used Lembaga Air Perak as the academic case study; the system was not an official client project.

TECHNICAL SKILLS

Programming Languages: Python, Java, C++, PHP, JavaScript, HTML, CSS, SQL, VB.NET, Dart

Frameworks & Development: Django, Flask, FastAPI, React, Flutter, Tailwind CSS, Windows Forms

Databases: MySQL, MariaDB, PostgreSQL, SQLite, Microsoft SQL Server

Tools & Platforms: Git, GitHub, VS Code, Visual Studio, XAMPP, Postman

APIs & Technologies: REST APIs, GitHub API, OpenAI API, Leaflet.js, OpenStreetMap, document/report generation

CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

Core Technical & AI: Data Science & Analytics — HP LIFE; SQL Foundations — Microsoft × Coursera; Power BI & Power Virtual Agents — Microsoft × Coursera; AI Fundamentals — Google × Coursera; AI for Data Analysis — Google × Coursera; AI for App Building — Google × Coursera; Designing User Interfaces and Experiences (UI/UX) — IBM × Coursera; Agile Project Management — HP LIFE; Introduction to Cybersecurity Awareness — HP LIFE

Google AI & Prompting: AI for Research and Insights; AI for Writing and Communicating; AI for Content Creation; AI for Brainstorming and Planning; Use AI as a Creative or Expert Partner; Design Prompts for Everyday Work Tasks; Start Writing Prompts like a Pro

Microsoft Skills for Jobs: Get Certified as an Excel Pro!; PowerPoint Pro Certificate; Word for Work

AWARDS, LEADERSHIP & CO-CURRICULAR ACTIVITIES

- Pingat Ketua Jabatan - Politeknik Balik Pulau
- Dean's List - Diploma and Bachelor's studies
- Team Lead - DevBoost, Future Ready Hackathon 2025 | Certificate of Participation
- Vice Treasurer - ICSDI Department Club, UCSI University
- Secretariat - Polytechnic Student Affairs