MUHAMMAD HELMI BIN ROZAIN

helmi020822@gmail.com linkedin.com/in/mhelmirozain
BSc in Intellectual Information Engineering University of Toyama

3rd-year BSc student in Intellectual Information Engineering with a strong passion for **Machine Learning (ML)** and **Artificial Intelligence (AI)**. Have some experience in building software such as **point of sale systems** and **website** such as **portfolio websites**. Also in creating **simple games** using **Unity** and **C#**. Enthusiastic about **robotics**, **microcontrollers** and **IOT**, leading to participation in **university robotics project**. Expert in **Python**, my primary programming language. Committed to **learn new technology** and **innovation**, with multiple projects showcased on my GitHub.

Competences & Languages

Operating Systems	Linux, Windows
Programming	Python, C, C#, Flutter, C++, Java, Web development, Game development, Embedded Systems
Languages	**Malay — (Native Speaker)** in reading, writing, listening, and speaking; **English — (Advance - TOEIC score 910)** in reading, writing, listening, and speaking; **Japanese — (upper-intermediate - JLPT N2)** in reading, writing, listening, and speaking;

Education

2019 2018	FULLY RESIDENTIAL SCHOOLS, **SM SAINS KUALA TERENGGANU, MALAYSIA** SPM 9A
2021 2020	Special Preparatory Program to Enter Japanese Universities, **University of Malaya**
present 2022	BSc in Intellectual Information Engineering, **University of Toyama** 3rd Year. Expected Graduation: 3/2026

Volunteering & Job Experiences

Rozeriya Enterprise (Part-Time Cashier) [2020]	Worked as a cashier after high school to support myself financially. Efficiently organized store inventory, provided exceptional customer service, and handled cash transactions accurately.
Japan Post (Part-Time Employee) [Dec 2022 & Dec 2023]	Worked during the peak end-of-year period, efficiently organizing and sorting large volumes of letters. Operated sorting machinery to ensure accurate and timely distribution to assigned locations Additionally, gained valuable experience in communicating effectively with Japanese colleagues in the Japanese language.
Python Programming Tutor [Nov 2023]	Designed and conducted personalized Python programming tutorials for Malaysian professionals working in Japan. Focused on foundational programming concepts and practical applications of Python. With a self-developed syllabus, I delivered engaging lessons aimed at improving their technical skills in a professional setting.
Tulip and Paddy Planting (Volunteer) [Oct 2022 & Oct 2023]	Participated in community gardening initiatives as a volunteer, focusing on planting tulip seeds and paddy crops. Worked collaboratively with a team to organize planting schedules and manage tasks, showcasing strong teamwork and organizational skills. This experience also provided an opportunity to improve Japanese language communication skills by interacting with local volunteers and community members.

Computer & Programming Skills

- **Python**: Began self-learning Python in 2018 while in high school, gaining proficiency in **algorithms**, **syntax**, and various libraries. Experienced in web development using **Flask**, **data analysis** with **Pandas** and **NumPy**, machine learning with **scikit-learn** and **TensorFlow**, and computer vision with **OpenCV**. Skilled in **scripting** and **automation** for task efficiency, and proficient in **web scraping** for collecting and analyzing information from various online sources. Contributed to the development of a point of sale system using Tkinter for the **user interface** and **Google Firebase** for database management, and participated in several **web development projects** utilizing **Flask**.
- **Javascript**: Learned JavaScript while building **web applications** using Flask. Gained experience in enhancing front-end interactivity, integrating JavaScript with Flask templates to create **dynamic and responsive user interfaces**, and connecting to **APIs** for data exchange. Utilized JSON format for **data handling** and **communication** between front-end and back-end components.
- **C**: Began learning C upon entering Toyama University, where it was a fundamental programming language in the curriculum. Applied C programming extensively in **robotics** projects, focusing on coding **microcontrollers** such as Arduino and STM32. Gained experience in **low-level programming**, **real-time system design**, and **hardware interfacing**. Developed skills in debugging, optimizing code for **embedded systems**, and implementing control algorithms for robotic applications.
- **C#, Java, Dart/Flutter**: Learned through side projects and university course work, leading to the development of **mobile apps and games**. Applied C# in **game development** with Unity, utilized Java for building **mobile applications**, and used Dart/Flutter to create **cross-platform apps**.
- **Microsoft Office**: Proficient in Microsoft Excel and Word. Experienced with Excel tools, formulas, and functions for **data analysis** and reporting. Familiar with VBA and Macros for **automating tasks** and improving efficiency. Utilized these skills to streamline processes and manage large datasets effectively.

Personal Projects

- `Python-POS-System`: **(Python, SQlite3)** Point-of-sale (POS) system using Python with Tkinter for the graphical user interface and SQLite for database management. Designed to streamline sales transactions, manage inventory, and generate reports.
- `BMX055-stm32`: **(C, STM32)** collecting raw data from the BMX055 Inertial Measurement Unit (IMU) using STM32 microcontroller. Implemented data acquisition and conversion processes to transform raw IMU data into readable and usable information.
- `parcel-pinnacle`: **(C#, Unity)** 2D platformer game called Parcel Pinnacle for Ludum Dare 53, where players control a postman navigating a cartoon-like environment, overcoming obstacles and jumping between platforms to deliver a package. Designed game mechanics and level progression to create a challenging yet engaging experience.
- `everyday-kanji`: **(Python, GUI)** Tkinter-based application designed for Japanese learners to efficiently memorize and recall kanji characters. The app features an interactive and user-friendly interface, making it a practical tool for daily kanji practice.

Digital Portfolio | GitHub | LinkedIn