

25 FEBRUARY 2026

FTMTECH

PROJECT PORTFOLIO

KUALA LUMPUR

doTask

PAST PROJECTS



Permainan Digital Interaktif Pengekodan Sekolah Rendah

PDISK



MINISTRY OF EDUCATION MALAYSIA

A government tendered project, under **Resource & Technology Education Division, Ministry of Education (MOE)**.

Developed a **comprehensive, gamified learning suite** designed to introduce students to the **fundamentals of coding** and **microcontroller logic**. The project leverages a **block-programming** interface (similar to Blockly), allowing students to easily grasp complex concepts by dragging and dropping command blocks to create and run programs.

Project Duration:

4 Months

Development Time:

2 Months

Highlights

- Highly involved during the early planning phase, where we had a three-day workshop with **teachers, executives, and officers** from the MOE to gain insights and feedback from the **subject-matter experts** themselves.
- UAT 1 and 2 were **successfully passed**. The Final Acceptance Test (FAT) is scheduled for early November 2025.
- This initiative culminates in the integration of the games into the **DELIMaFLiX** national platform, directly enriching the learning experience for the **entire Malaysian student** population.



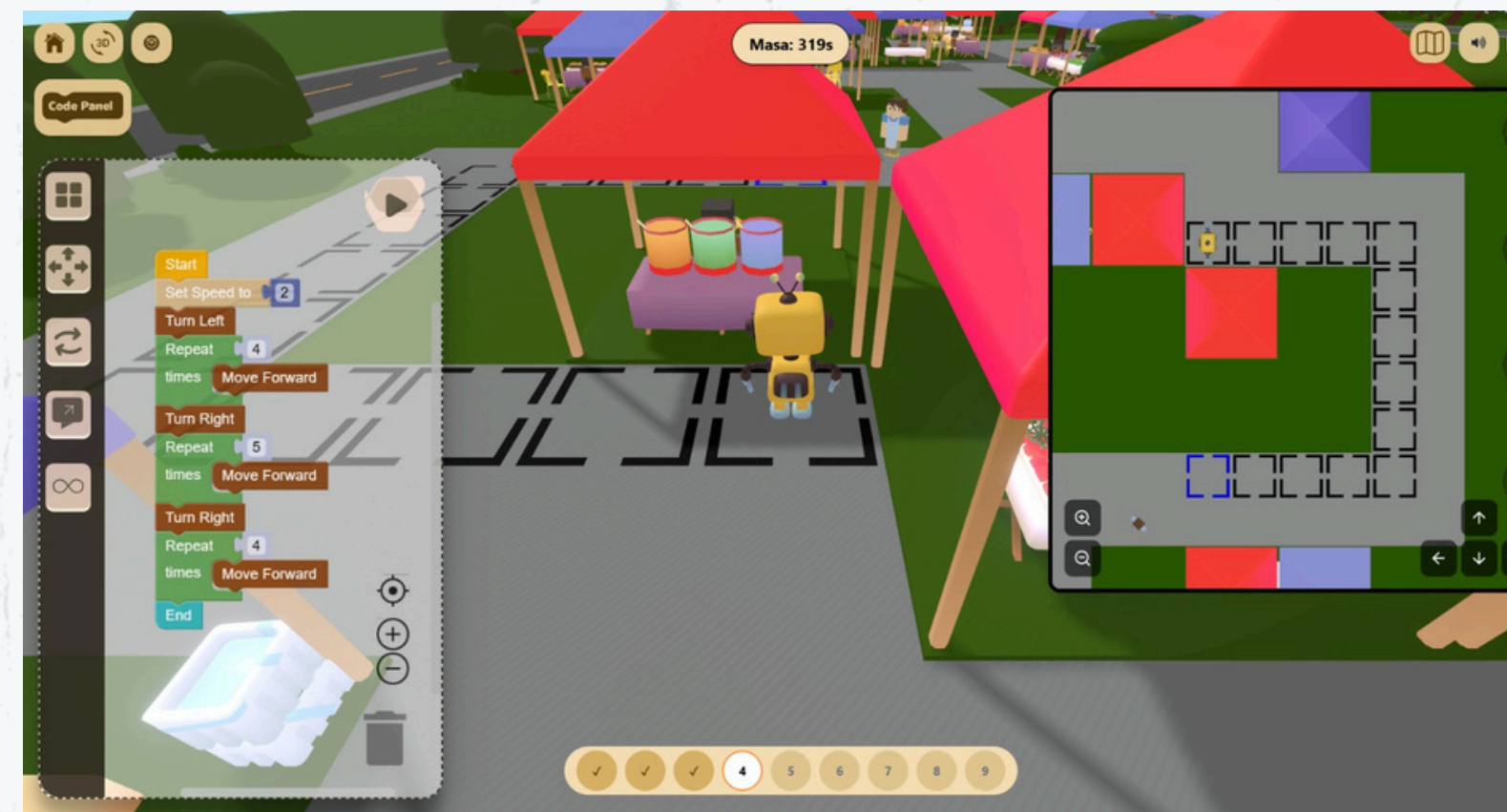
This suite is structured across three progressive game modules that gradually build computational thinking skills:

- **Foundational Logic:** Students start with basic programming concepts, such as sequencing and loops, by controlling character movement in a game environment.
- **Circuitry & Output Control:** The complexity increases as students learn to interact with virtual hardware, programming microcontrollers to manage outputs like light bulbs and traffic lights.
- **Real-World Application (IoT):** The final module challenges students to apply their knowledge to practical scenarios, programming virtual home sensors (alarms, gas/smoke detectors) and actuators (fans), effectively teaching the basics of the Internet of Things (IoT).

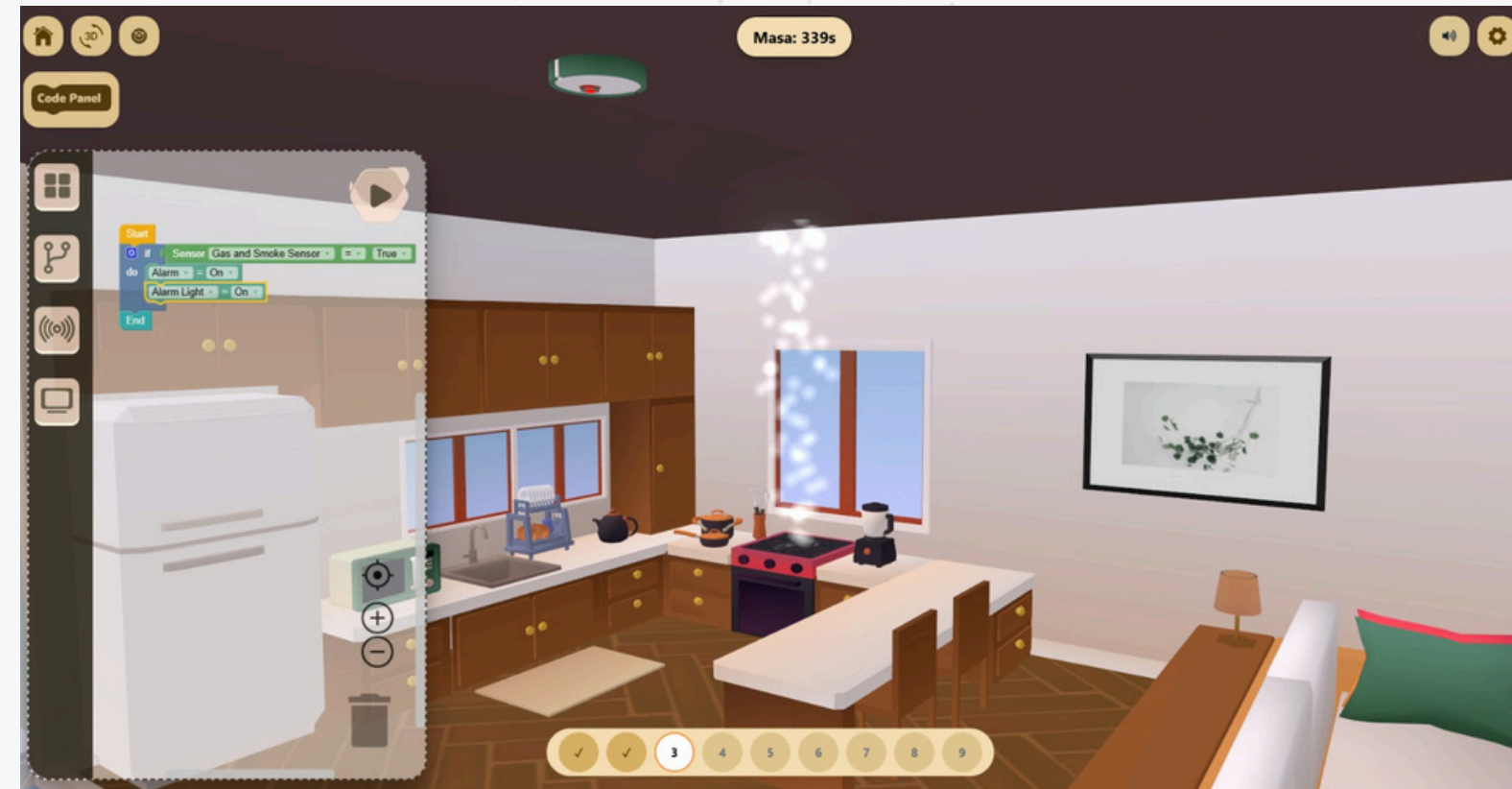
Game 2: Microcontroller and Circuit Design



Game 1: Basic movement and logic



Game 3: Microcontroller and Sensor



First workshop with MOE where we presented the POC



Final Acceptance Test (FAT)



Referral-Based Mobile Rewards Application

PIKOPIKU

Pikopiku is a **mobile referral and rewards app** developed for a coffee vending machine business offering **affordable** yet **high-quality** coffee.

The app allows users to scan a QR code during purchase to **earn points, apply discounts, and progress** through referral-based reward levels.

Beyond its loyalty system, Pikopiku showed strong **marketing potential**, as both the app and vending machines could be leveraged for **brand collaborations** and **ad placements**.

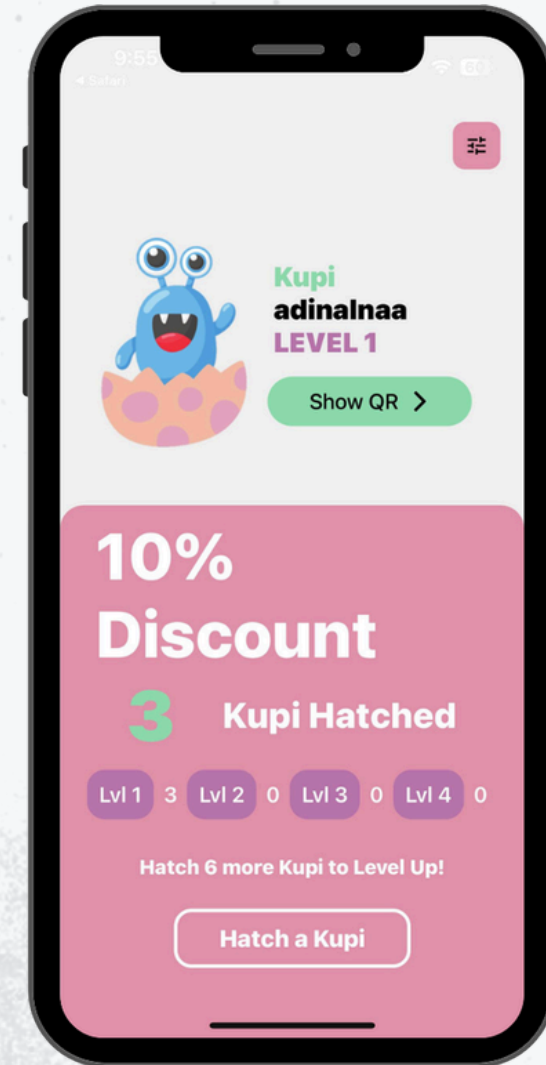
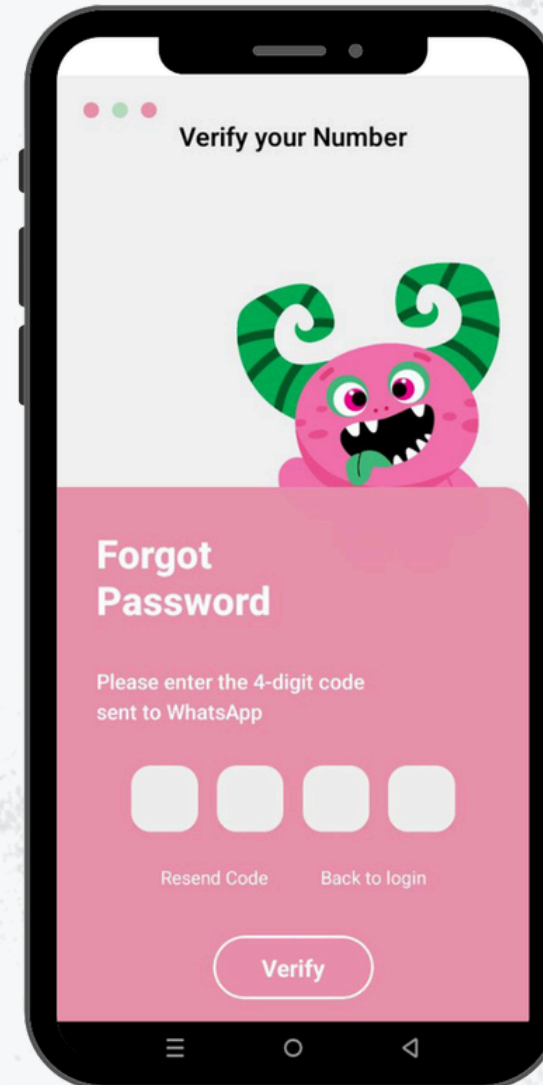
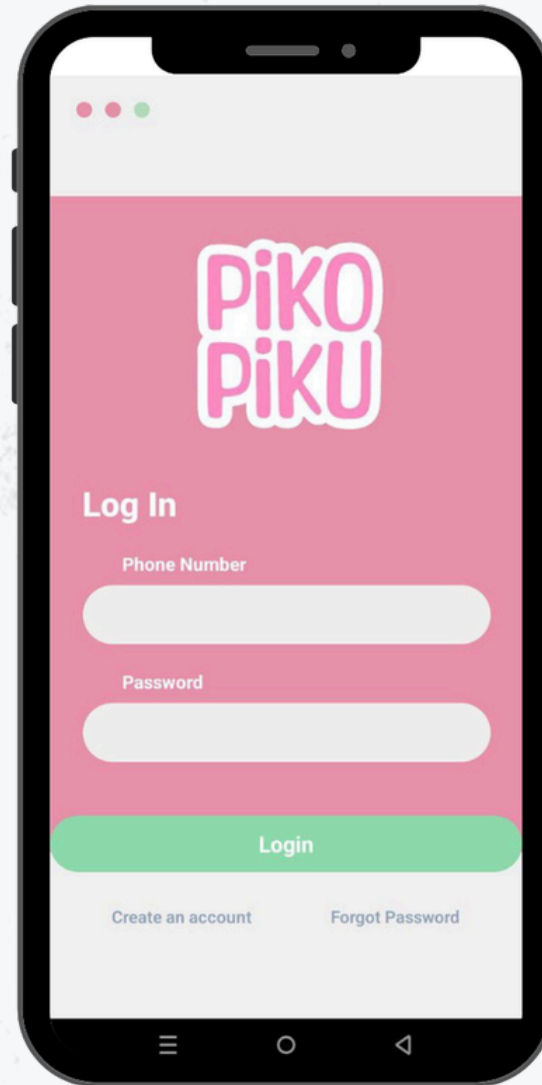
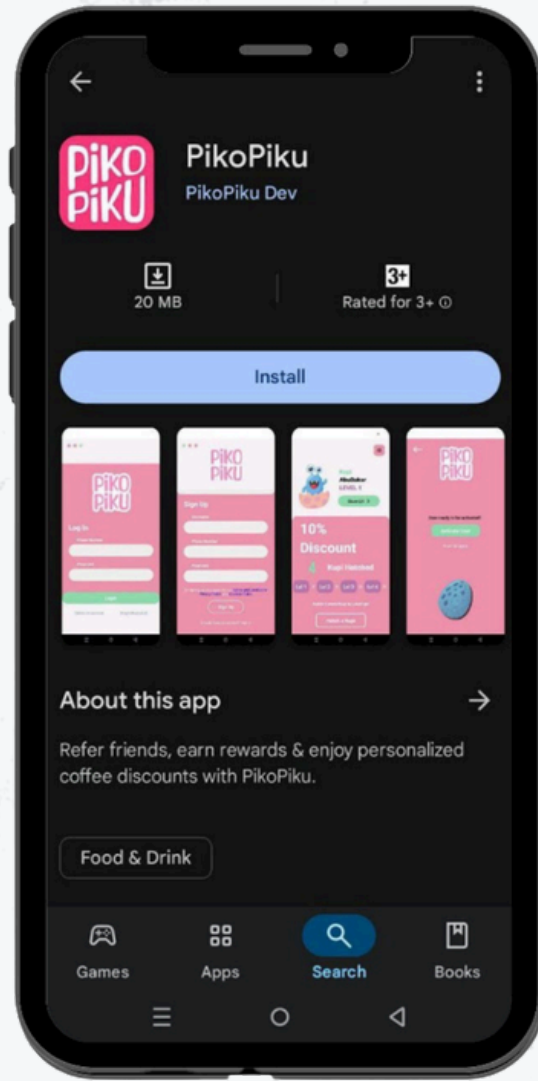
After completing the **MVP**, the business owners decided to sell the company.

Project Duration:
2 Months

Highlights

- One of the **quickest mobile app** MVPs completed by our team which included **full documentation** such as the SRS, User Manual, etc.
- Required **a deep understanding** of the overall **architecture**, involving multiple integrations with the **vending machine API, payment gateway, and user management module**. Utilized WhatsApp-based registration to enhance security and prevent account duplication.
- Developed using **Expo (React Native)** for rapid cross-platform deployment and consistent performance across **Android** and **iOS**. Leveraged **AWS services** to improve **backend performance** and **scalability**.
- Available on the **Google Play Store** as part of its MVP rollout.





Snippets of the mobile apps



Predictive Modeling for Midfacial Measurements

CRANIOMAX

A government-tendered project under **Ministry of Science, Technology and Innovation (MOSTI)** developed in collaboration with **a specialized surgical team** and **mathematicians** to translate intricate research data and complex mathematical models (Linear Regression) into a **user-friendly software interface**.

Delivered a predictive system that generates **a precise 3D model** from cranial measurements, empowering surgeons with predictive insights for **crucial surgical** interventions. Ensured high-level accuracy and precision in the solution, critical for addressing deformities in the **facial skull of children**

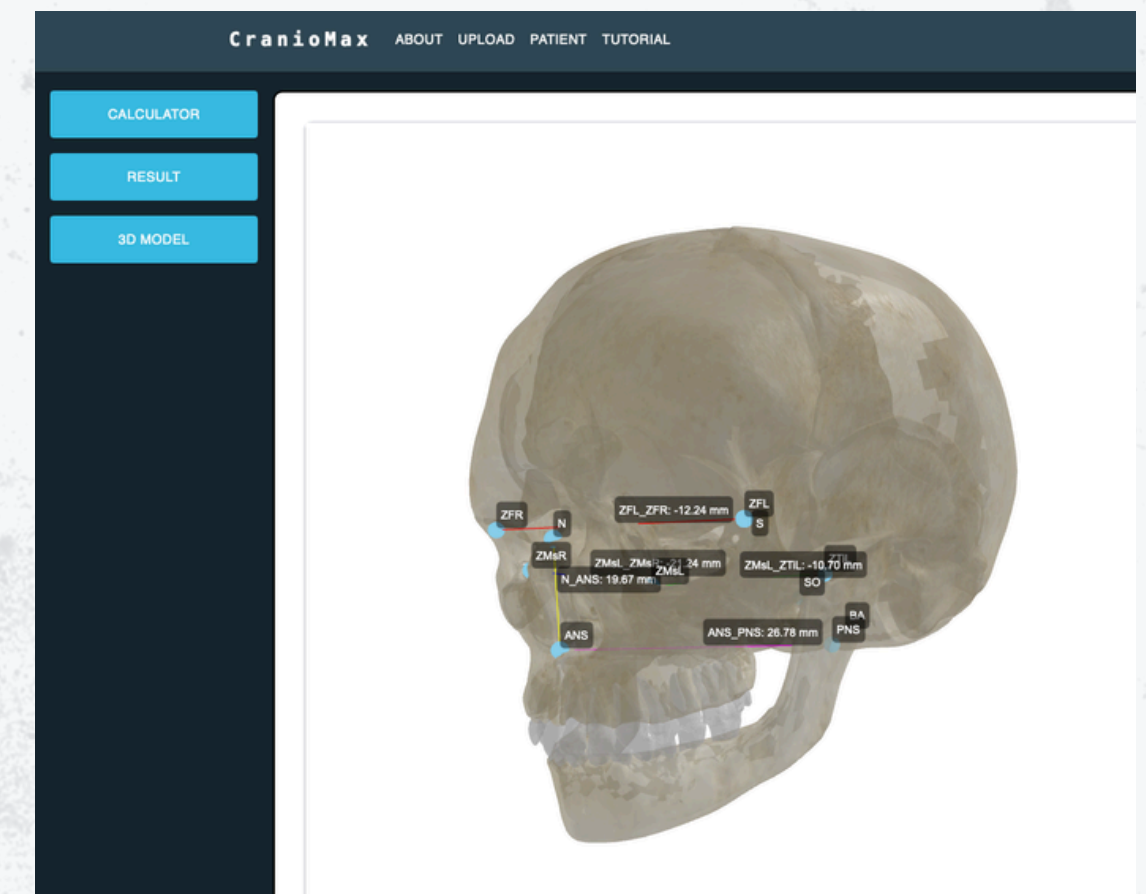
Project Duration:
2-3 Years (Ongoing)

Highlights

- A niche project combining **medical research** and **mathematical modeling**, requiring **close collaboration** with a specialized surgical team and mathematicians.
- Completed Phase 1 (MVP) while securing grant support for the next stage, which will include **3D CT scan visualization** and **interactive anatomical simulation tools** and many more.
- The system aims to **pioneer** a local 3D surgical modeling platform, supporting skill development and research within **Malaysia's healthcare ecosystem**.



**KEMENTERIAN SAINS,
TEKNOLOGI DAN INOVASI**
MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION



3D generated model of a patient's skull with the predicted measurements



UNIVERSITI MALAYA

CRANIOMAX-AIRSCAN: BREATHING HEALTH DETECTOR

TECHNOLOGY OVERVIEW

This application provides early detection of breathing problems that may be caused by facial structural abnormalities. Many people are unaware that midfacial deformities can restrict the airway, leading to breathing difficulties and potentially serious conditions such as sleep apnea and microsleep due to oxygen deprivation. Conventional CT scans are expensive and time-consuming, requiring patients to visit hospitals for evaluation. Our mobile application offers a convenient, radiation-free, and affordable alternative, enabling users to screen for potential airway obstruction directly from their phones. It serves as an early detection and educational tool to help patients understand the underlying causes of their symptoms while assisting doctors in planning appropriate treatment.

OUR PROTOTYPE

FOUNDER

Prof. Dr. Firdaus bin Hariri
 Department of Oro-maxillofacial Surgical & Medical Sciences, Faculty of Dentistry.
 Subspecialty and research interests focused on pediatric craniofacial and reconstructive surgery, tissue engineering in particular distraction osteogenesis technique, bone regeneration for oral rehabilitation and the field of neurotrauma.

AWARDS & ACHIEVEMENTS

- 1) 1 patent
- 2) 5 copyrights
- 3) 8 publications in ISI-Indexed journal.
- 4) Selected in Innovathon Season 3 - a program by MOSTI, Ministry of Economy and ASTRO
- 5) Successful application in 5 pilot surgeries

Breathing Health in One Scan

Smartphone + AI = Professional Respiratory Assessment

4-Step Assessment, Protecting Every Breath

No equipment needed
 Safe & non-invasive
 Instant results
 Clinical support

CRANIOMAX AIRSCAN

Who Should Use AIRSCAN?

- Monitor children's facial development
- Screen adult breathing health
- Assist doctors in diagnosis



AI-Powered Career Guidance Platform

DEGREEEMATE



DegreeMate is an **AI-powered web application** that helps university students identify suitable **academic paths** based on current **job market trends**.

The system analyzes **real-time market data** and aligns it with university offerings to recommend **relevant courses** and skill development **opportunities**.

DegreeMate continues to evolve through active collaboration and real user feedback. Following a **successful UAT** with university students who praised its usefulness and user experience, the team is now refining the platform to deliver even more personalized and impactful academic guidance starting with students at **Universiti Malaya** before expanding to **universities across Malaysia**.

Project Duration:

3 Years (Ongoing)

Highlights

- Utilizes **AI** and **data analysis** to identify in-demand skills and recommend academic paths that align with **real-world job market trends**.
- Designed for **modular expansion**.
- Aims to strengthen **Malaysia's education-to-employment pipeline** by aligning academic development with **future job market needs**.
- Integrates student feedback to refine AI recommendations, enhancing **precision** and **personalization** over time.

AI/Machine Learning Engineer Pathway

Plan and begin your dream career.



Career Information

AI and machine learning specialists are experiencing unprecedented demand as 90% of employers actively search for professionals with AI skills. Role involves developing and implementing AI solutions across various industries.

Salary Range:
RM 150,000 - RM 280,000

Demand:
Exceptional demand with 90% of employers actively searching for AI skills. AI is projected to affect 600,000 workers over next five years while creating 60 new job types.

Industry Impact:
Leading Malaysia's AI transformation with government backing through RM25 billion allocation for high-value manufacturing and talent development.

Bachelor's Degree

Here are the bachelor's programmes offered by Universiti Malaya.

Bachelor of Computer Science (Artificial Intelligence)

This programme equips students with the knowledge and skills to design and develop computer systems that emulate and exhibit human intelligence. Students will learn the theoretical and practical aspects of Robotics, Cognitive Science, Image Processing, Natural Language Processing, Machine Learning, Artificial Neural Network, Fuzzy Logic, Expert Systems and Logic Programming.



[View](#)

Master's Degree

Here are the master's programmes offered by Universiti Malaya.

Master of Artificial Intelligence (Coursework)

This programme encompasses the theoretical and practical knowledge of Artificial Intelligence, equipping the candidate with the knowledge and skills needed to produce AI solutions that support automation. The type of programme offered for the Master of Artificial Intelligence is a programme consisting of 10 coursework which prepares students for the final capstone project, which allows students to apply the knowledge they learned in the taught courses to real-world applications.



[View](#)

Skills

These hard skills are essential for your career.

New courses coming soon to help advance your career

Soft Skills

These soft skills are essential for your career.

[CRITICAL THINKING AND COMMUNICATION SKILLS](#) [DEVELOPING WORKPLACE SKILLS](#) [SUSTAINABILITY THROUGH ENTREPRENEURSHIP](#) [INTRODUCTION TO SOCIAL ENTREPRENEURSHIP](#)

Certifications

These certifications would help with your career.

As DegreeMate's current phase emphasizes **backend development**, much of the effort has been dedicated to building the **AI engine, data pipelines, and system scalability**. The user interface remains **minimal** for now, with visual refinements planned in **future iterations**.

You can access the early release of the apps [here!](#)



Team dinner with our client, **Dr Norli Anida** (left most) to celebrate the completion of the first phase of **DegreeMate**.

Thank you for you time