



Mirza Rayana Sanzana

Researcher

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About Me

I'm an academic researcher with a strong interest in harnessing AI for beneficial purposes and advancing effective learning methods. My research centers around optimizing Thermal-Energy-Storage Air-Conditioners using AI, with a focus on sustainability in energy and healthcare. Additionally, I'm passionate about integrating digital technologies into education for improved engagement. As a Global Changemaker for Malaysia and a United Nations Volunteer, I'm dedicated to proactive research and community contributions with the aim of promoting AI for good.

Hard Skills

- Artificial Intelligence
- Data mining and analysis
- Extended Reality & Serious Games
- Pedagogy
- Academic Writing

Soft Skills

- Problem-Solving
- Decision making
- Communication

Achievement

Nov 2023 | University of Nottingham
LinkedIn Profile Champion

Oct 2023 | AWS AI & ML Graduate
Machine Learning Engineer Nanodegree

May 2023 | AWS AI & ML Scholarship
AWS AI & ML Advanced Program

Mar 2023 | AWS AI ML

AI Nanodegree Project Completion

Dec 2022 | WomenTech Global Awards
Second Place IT Graduate of the Year

Nov 2022 | University of Nottingham
Champion in Resume Competition

Oct 2022 | AWS AI & ML Scholarship
AI Programming with Python Nanodegree

Sep 2022 | MNFF Network
Second Place for Thesis in 5 Minutes

Jul 2019 | University of Nottingham Malaysia
SEPRS Full Scholarship for Ph.D.

Feb 2019 | University of Nottingham Malaysia
Nottingham Advantage Award

Jan 2015 | University of Nottingham Malaysia
High Achievers' Scholarship

Research Assistant

- 2023
3 months
Virtual Reality Building Information Modeling Education
An innovative teaching method for Building Information Modeling (BIM) for undergraduate students with Oculus Quest with a story telling and exploratory method to understand the concept better.
- 2020-2021
7 months
Gamified Labs for Biology and Chemistry
Two 3D games were created for Biology and Chemistry education for Foundation students, and research on gamified lab education's effectiveness in supporting distance learning was undertaken.
- 2019
4 months
Stereochemistry Virtual Reality Lab
An immersive virtual reality game for educating higher education students about stereochemistry was created, incorporating voice, characters, animation, and in-built gamified quizzes.
- 2019
2 months
Virtual Reality Scenic Immersion
With Oculus Quest, a complete immersion experience is created with 360° photos of a pharmaceutical laboratory.
- 2019-2020
7 months
Alumni Job Platform with Soft Skills Evaluation
A customized social media platform for a company was developed with integration of soft skill development and evaluation for job searching.

Education

- 2019-2023
3 years
Ph.D. in Civil Engineering
The research focuses on leveraging deep learning techniques, a subset of Machine Learning of Artificial Intelligence domain to optimize the efficiency of Thermal-Energy-Storage Chiller Plants to improve facility management and maintenance of a commercial building. Earned the title of Ph.D. holder after successfully defending my doctoral research.
- 2018-2019
1 year
Masters in Computer Science
Graduated with Merit with 64.5%. Final Year Project involved developing a Virtual Reality Game about oil rig for higher-education students and then researching which method was more effective by comparing Lecture based method, VR game-based method, and a combined method.
- 2015-2018
3 years
Bachelors in Software Engineering
Graduated with First Class Honours with 73%. Final Year Project involved Blood Donation Application development with a mobile app and web portal to handle emergency with GPS for better crisis management.

Reference

Dr. Jing Ying Wong

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Dr. Tomas Maul

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