

Wong Weng Wah

williamwww8@gmail.com · www.mechamoon.xyz
Kajang, Selangor



WORK EXPERIENCE

Genting SkyWorlds Technical Department, Genting Malaysia Berhad <i>Theme Park Service Engineer Executive Intern</i>	Genting Highlands, Pahang June 2024 - Sept 2024
<ul style="list-style-type: none">Performed corrective and preventive maintenance on mechanical and electrical systems of six rides during and after park hours with a team of technical staff.Maintained daily, weekly, bi-weekly, and monthly checklists in compliance with safety guidelines and industry standards, including TUV and Disney.Maintained service reports on all corrective maintenance activities to facilitate troubleshooting and trend analysis.Prepared comprehensive reports on bolt/screw torque values and compiled spare parts lists by referring to the ride's engineering drawings and manuals.Collaborated with technical executives to effectively manage a team of 30 technical staff.	

EDUCATION

University of Nottingham Malaysia , School of Electrical and Electronics Engineering <i>MEng (Hons) Mechatronic Engineering</i> Autonomous Vehicle, AI, 3D Printing, Aerial Robotics, Advanced Control Systems, CAE	Semenyih, Selangor Sept 2021 - June 2025 Results: 72% (First-Class)
Methodist Boys' Secondary School Kuala Lumpur <i>Sijil Pelajaran Malaysia (SPM)</i> Physics, Chemistry, Additional Mathematics, English as First Language (IGCSE)	Kuala Lumpur, WPKL Jan 2015 - Dec 2019 Results: 4A+ 1A 3A- 1B

ACADEMIC PROJECTS

- Developed and simulated an Artificial Neural Network-based novel Maximum Power Point Tracking method for a string of solar panels using Simscape in MATLAB Simulink as part of my Final Year Project, which boasted better efficiency compared to traditional PSO and P&O methods.
- Developed a 3-DOF vehicle longitudinal simulation model in MATLAB/Simulink and validated using IPG CarMaker, and implemented a PD ABS control system.
- Simulated an octocopter using Simulink, along with trajectory planning, and implemented simple LQR control.
- 3D printed a shape-sorting toy using FDM technology; conducted research on current trends and advancements in additive manufacturing.
- Designed and implemented RS232 receiver and transmitter systems in VHDL using Xilinx FPGA technology.
- Developed and designed a semi-autonomous freshwater monitoring aquatic vehicle as part of a group project.
- Trained a deep convolutional neural network to classify good and bad germinated palm oil seeds using computer vision techniques.
- Reverse-engineered an Arabian Teapot using SolidWorks to generate a precise 3D CAD model, along with stunning renders of the Arabian Teapot using SolidWorks Visualise.
- Conducted FEA analysis, design studies and topology studies on wind chimes and bicycle crank arms using SolidWorks.
- Performed FEA analysis on synchronous motors using FEMM to evaluate performance and efficiency.
- Developed and designed a centrifugal clutch as part of a group project.
- Developed and designed a robotic scoop for a small-scale automation system as part of a group project.

TECHNICAL SKILLS

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| <ul style="list-style-type: none">MATLAB/SIMULINKCAD using SolidworksIPG CarMakerC / C++ / Python ProgrammingMicrocontroller programming (Arduino & Raspberry Pi) | <ul style="list-style-type: none">FDM 3D PrintingFPGA XilinxEmbedded Systems using PIC16F887Computer Vision & AIUsing Ubuntu |
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LANGUAGES

- English (Business Fluent)
- Bahasa Malaysia (Good / Conversational)
- Mandarin (Basic Knowledge)
- Cantonese (Mother Tongue)

CERTIFICATIONS

World Robot Olympiad New Delhi 2016 High Distinction International Level	UNM IEEE Maze Solving Competition 2024 Champion
UNITEN Green Millennial Exhibition 2019 1st Runner Up National Level	UNM Arduino Soccer League 2024 Best Design