

MUHAMMAD SYAFIQ MIRZA BIN MUSA

Chemor, Perak, MY | P: +60 195600107 | syafiq90622@gmail.com
<https://www.linkedin.com/in/syafiqmirza/>



PROFILE

Final-year Mechanical Engineering student (graduating October 2025) seeking an entry-level role in a forward-thinking engineering or aerospace company. Eager to contribute strong CAD skills, UAV project experience, and a hands-on approach to real-world engineering tasks. Open to start remote or part-time work immediately, with full on-site availability from January 2026 once licensing and transport readiness are completed.

EDUCATION

UNIVERSITI MALAYA

Bachelor of Mechanical Engineering
Latest CGPA: 3.35

Kuala Lumpur, MY
Sep 2021 - Present

PUSAT ASASI SAINS UNIVERSITI MALAYA

Foundation in Physical Sciences
CGPA: 3.23

Kuala Lumpur, MY
Jul 2020 - Jun 2021

EXPERIENCE

AEROSPACE MALAYSIA INNOVATON CENTRE (AMIC)

Kajang, MY

Mechanical Engineer Intern

Oct 2024

- Contributed to the 3D CAD design, fabrication, and assembly of a movable robot workstation and modular panels, enhancing workstation for Selangor Aviation Show 2024.
- Applied SolidWorks and hands-on workshop skills to support the design-to-build process for robotics applications.

UNIVERSITY PROJECTS

FINAL YEAR PROJECT: DEVELOPMENT OF LIGHTWEIGHT AND SCALABLE AUTONOMOUS UAV PLATFORM FOR LOW-COST INTELLIGENT AERIAL SENSING

June 2025

- Designed and built a sub-300g UAV with ArduPilot for autonomous modes (Auto, Loiter, Guided, RTL) and YOLOv11 object detection achieving 90% accuracy.
- Won Silver Award at UM UG I-Fest 2025, placing among top projects (out of 1,000 participants)

INTEGRATED DESIGN PROJECT: DUCTED FAN DRONE FOR INDUSTRIAL INSPECTION

June 2024

- Led the design and fabrication of a ducted fan drone for safe inspections in confined industrial spaces.
- Integrated ArduPilot, Mission Planner, and YOLOv8 AI for crack detection and autonomous navigation.

ACTIVITIES

INSTITUTION OF MECHANICAL ENGINEERS UM STUDENT CHAPTER (IMECHE UM)

2021 – 2025

- Selected for FIDA Dronesoccer Winter Camp 2025 at Jeonju, Korea and UM Senior Trainer for World Cup Competition.
- Participated in ESUM x FUTURISE UKM Drone Workshop and LIMA2025. Joined student exchange at Prince of Songkhla University (Thailand) and Universitas Airlangga (Indonesia).

ANGKATAN KEJURUTERAAN ISLAM UNIVERSITI MALAYA (AKIUM)

2021 – 2024

- Director of Co-Academic Exco: Founded UM's first Formula Student Team.
- Organized MotoGP event trips, managed event for AKIUM Formula Student Launching.

ADDITIONAL

Technical Skills: Advanced: SolidWorks, CAD, Fusion 360, 3D Printing, Ultimaker Cura, Canva. Proficient: Programming (C, C++), LabVIEW, ArduPilot, Capcut, MS Office, MS Excel. Basic: Ansys, Python, Adobe Photoshop, MS Project

Languages: Malay (fluent), English & Arabic (conversational), German, Russian, Japanese & Chinese (basic).

Reference: Professor Ir. Dr. Mohd Faizul bin Mohd Sabri, Professor & Deputy Dean of Research, Faculty of Engineering, Universiti Malaya, faizul@um.edu.my, P: +60 13-621 0037.

Ir. Dr. Mohd Ridha bin Muhamad @ Mohd Ata'illah, Associate Professor, Department of Mechanical Engineering, Universiti Malaya, ridha@um.edu.my, P: +60 11-3224 8175.