ADRIEL SEBASTIAN JOSEPH

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LINKS

Portfolio, LinkedIn

PROFILE

An aspiring and dedicated fresh graduate in Mechanical Engineering furnished with an excellent problem-solving skills, communication skills and leadership background, and an enthusiastic person able to work in a fast-paced working environment where I can utilise my knowledge and technical skills. Beyond that, very ambitious in working on Research and Development, Mechanical Designing and Artificial Intelligence based.

EDUCATION

Oct 2018 — Jun 2022

Bachelor of Mechanical Engineering (Honours), Monash University

Subang Jaya

Academic Record:

- Current CGPA: **3.65/4.0**
- Current WAM: **77.54 %**
- On track for **Second Upper Class Honours** (H2A)

Jun 2016 — Jun 2018

GCE A-Level, KDU University College Penang

Georgetown

Academic Record:

- Grade: **1A* 1A 2B's**
- Score : Mathematics (91) , Physics (85), Chemistry (78) and Further Mathematics (76)

EMPLOYMENT HISTORY

Nov 2021 — Feb 2022

Software Engineer Intern , Optergy Sdn Bhd

Kuala Lumpur

- Worked on the Smart Building Project by creating test cases and scenarios for the created software called HEVEA.
- Configured the smart tablet for the Smart Building Project which is yet to be implemented in the smart building.
- Worked on AutoCAD to edit and label on the blue print of the smart meeting room, discussion room and personal rooms located in the smart building plus learn simple designing.
- Visited International School of Kuala Lumpur (ISKL) as site visit with purpose to check on the maintence of the HVAC system in that smart building plus learn on the HVAC system.

Dec 2020 — Feb 2021

Mechanical Engineer Intern, Foresight Asia Pacific

Bayan Lepas

- Design a complicated 3-Dimensional tube according to the customer expectation with the Solidwork drawing given.
- Done a case study on the performance of different type of plastics when being fabricated using different process (e.g., routing, lathe).
- Done work of a costing engineer to price an object before being fabricated with a deep analysis of GD&T of the object.
- Worked on the Purchase Order (PO) and the Sales Order (SO).

Apr 2021 — Nov 2021

Undergraduate Researcher, Monash University

Subang Jaya

- Project Title: Designing cantilever-based sensors: A Modeling Approach.
- Worked under supervision on research topic "Microcantilever-based platforms as biosensing tools".
- The final aim is to develop a biosensor technology that is fully integrated, cheap, portable and reliable single platform, able to detect and identify simultaneously different molecules in real time with high sensitivity, even at the single cell and single molecule level.
- This program provided me an early opportunity to experience a genuine research environment, working either with a supervisor and/or a research group.
- Selected to participate in the Undergraduate Research Opportunities Program (UROP) out of 200 candidates.

PERSONAL PROJECT

Jul 2021 — Jun 2022

Heat transfer enhancement using curved fins in an annular flow domain with carbon-based colloidal suspension

Subang Jaya

- This research based on fluid mechanics and thermodynamics to enhance the heat transfer in heat exchanger instrument which has been used broadly in many engineering fields.
- An unique geometry of annular flow domain used for the heat exchanger and implement a surfboard curved fins in the passage to induce recirculation zone to enhance the heat transfer using an unique fluid named graphene nanoplatelet (GNP) nanofluid due to the thermophysical property.
- Total of 72 simulation study done with three turbulence booster, four fluids and six different fluid flowrate to achieve the hypothesis.

Jul 2021 — Nov 2021

Design Project - Designing a go-kart/ATV racing vehicle and the racing track

Subang Jaya

- The ambition of this project is to propose a Go-Kart company outline by designing and integrating the customised Go-Kart vehicle and racing track plus proposing a business plan to start the company.
- The vehicle is powered by an internal combustion engine (ICE).
- ANSYS, Solidworks and Matlab softwares has been used in building different system of the vehicle, FEA studies for analyzing the performance of the design plus CFD studies for the Aerodynamic and Thermodynamics analysis of the vehicle.

Jul 2020 — Nov 2020

Experiment Based Numerical Validation on SSG 0.2 - INDUCED TURBULENCE

Subang Jaya

- This research presents the experimental based numerical validation for single square grid (SSG) induced turbulence.
- The turbulence modelling is done by the linear pressure -strain Reynolds Stress Model (RSM) and ANSYS Fluent ver 19.2.
- Benefit of the research that SSG is like microscopic view on the generation of turbulence. This will then allow us to see in extreme detail how is turbulence induced. With this knowledge, it may be possible to open new paths into researching turbulence.

SKILLS

Ansys	**Git, GitHub, GitKraken**
Solidworks	**AutoCAD**
Matlab/Simulink	**HTML/CSS/JavaScript**
Python	**Abaqus**

EXTRA-CURRICULAR ACTIVITIES

Jan 2020 — Dec 2020

Vice President, Monash University Malaysia Engineering Club (MUMEC)

Subang Jaya

- Successfully coordinated and hosted the Monash Hackathon Competition 2019.
- Organised the Engineering E-Exploration Week 2020 virtually.
- Keep in track with all the other 8 engineering club to improve their club performance and social activities.
- Organised and hosted meetings in every month to understand the current performance of the club and solve problems to enhance the club recruitment and student social life especially during pandemic.

VOLUNTEER EXPERIENCE

Feb 2020 — Feb 2020

The 41st Engineering Development, Motivation and Awareness Training - EDMAT-41

Kuala Lumpur

Organised by UNIVERSITY MALAYA (UM)

- A total of 5 countries student leaders from varies university has take part in this 5 days camp event.
- The idea of the whole camp is about Sustainability which leads to Innovation.
- Monash University Malaysia has won the 1st Place in this Innovation and Sustainability challenge.

REFERENCES

References available upon request