ADRIEL SEBASTIAN JOSEPH, ENGINEER

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LINKS

Portfolio, LinkedIn

PROFILE

An aspiring and dedicated 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, Artificial Intelligence and Machine Learning. Plus, have a 4 months+ professional working experience as an Automation Engineer.

EDUCATION

Oct 2018 — Jun 2022

Bachelor of Mechanical Engineering (Honours), Monash University
Subang Jaya

Academic Record:

- CGPA : **3.692/4.0**
- WAM : **77.948 %**
- On track for **Second Upper Class Honours** (H2A)

Achievement:

- Faculty of Engineering Dean's Honour List 2019
- Certified Solidworks Associate in Mechanical Design scoring 225/240 marks in CSWA exam
- Champion for LED-based Smart Table Lamp Creative and Building Competition

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EMPLOYMENT HISTORY

Nov 2022

Automation Engineer, Pentamaster Corporation Berhad
Bayan Lepas

- Worked on project understanding and maintaining the sequence of PLC (Programmable logic controller) program in Siemens therefore able to implement the sequence to run the machine accordingly.
- Done PLC Setup, IO inspection, Barcode Scanner setup, Motor setup and Teach points (Festo and Oriental motors)
- Done hardware and software configuration.
- Worked with control and mechanical team to troubleshoot hardware problems, to improve machine design and machine efficiency hence able to improve the machine run time.
- Learned to solve problems by writing sequence in Siemens and Keyence.
- Created report and complete manual on the project done.

Nov 2021 — Feb 2022

Software Engineer Intern , Optergy Sdn Bhd
Kuala Lumpur

- Worked with a team of passionate engineers for 12 weeks as a Smart Building/Software Engineer Intern.
- Worked on 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 maintenance 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

- Worked with a highly experienced engineers for 12 weeks as a Mechanical/Industrial Engineer Intern.
- 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 an early opportunity to experience a research environment and research group.
- Selected for 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

- Research title: 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	HTML/CSS/JavaScript
Solidworks	SQL
Matlab/Simulink	C/C++
Autodesk AutoCAD	PLC programming
Computational Fluid Dynamics	Machine Learning
Python	TensorFlow

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.
- Organised and hosted meetings in every month to understand the current performance of 8 clubs and solve problems to enhance the club recruitment and student social life especially during pandemic.

REFERENCES

References available upon request