

Muhammad Izzat bin Fadzlon

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EDUCATION

SkillsFuture Career Transition Programme (NTU SCTP)	Nov 2023 – Current
<ul style="list-style-type: none">Relevant skills: HTML, CSS, Javascript, Java, React, Springboot, DevOps, Containerization, React Native	
Nanyang Technological University	Aug 2018 – Aug 2022
Mechanical Engineering (Robotics and Mechatronics Stream)	
<ul style="list-style-type: none">CGPA 4.27/5.00Relevant modules: Intro to Computational Thinking, Robotics, Mechatronics System Interfacing, Realtime Software for Mechatronic Systems, Mechatronics Engineering Design	

SKILLS

- Software: HTML, CSS, React, GIT, JavaScript, Java, C, C++, OOP, JIRA, Confluence, Agile, Python, VS Code, Blender, Arduino, Vector CANoe, IBM DOORS
- Languages: English(fluent), Malay (fluent)

PROJECTS

Personal Projects

SteamBot that automatically add/chat/trades with Steam users	Jan 2023 – Mar 2023
<ul style="list-style-type: none">Design a fully automated bot using Javascript and Steam APIs that automatically adds and trades with users.Automatically tracks and manages in-game currency to always display up-to-date currency information and ensure enough currency is available at all times.Included a chat function whereby steam users can ask the bot for help using certain prompts to allow for autonomous assistance.Achieved a 50% profit in 1 month of running the bot from trading with public Steam users.	

University Academic Projects

Dyson x NTU Product Development Challenge	Aug 2020 – Nov 2020
<ul style="list-style-type: none">Conceptualized an original product under the mentorship of a Dyson engineer.Designed and built kitchen prototypes for a bicycle helmet that allows for easy signalling using signal lights, with the inclusion of HUD technology.	
Mechatronics system competition to design an autonomous robot	Sept 2019 – Nov 2019
<ul style="list-style-type: none">Designed a robotic vehicle from scratch by interfacing Arduino microcontrollers, sensors and actuators in C.Used realtime concepts and multithreaded approach in designing the logic behind the robots movements.	

WORK EXPERIENCE

Software Engineer, Continental Automotive	July 2022 – Current
<ul style="list-style-type: none">Ensuring API calls triggered by driver input are accurately received between different control units in the cars, such as digital clusters and head units.Debugging of test tickets received from customer by analyzing CAN traces.Usage of JIRA for ticket creation and allocation in the context of Scrum methodology.Development of new features through object-oriented programming while conducting unit test validation through GoogleTest using C/C++.	
Lead Product Design, Amplefresh	Aug 2021 – July 2022
<ul style="list-style-type: none">Spearheaded the design and development of water-channelling conduits used in our first testbed situated at Bulim Square in collaboration with JTC.Developed technical animations using Blender, explaining key features of our testbed to clearly present to sub-contractors our structural design requirements.	
Mechanical Engineer Intern, Continental Automotive	Jan 2021 – May 2021
<ul style="list-style-type: none">Assisted in characterization of smart materials used in generating haptic feedback and morphing surfaces with oscilloscopes and signal generators.Given full responsibility in self-learning Blender software for product animation of relevant prototypes, eventually being showcased during the Continental-NTU Corporate Lab inauguration.	
Robotics Software Engineering Intern, Transforma Robotics	May 2021-Sep 2021
<ul style="list-style-type: none">Interfaced LiDAR sensors and built upon open-source ROS middleware to create an action server for Work at Height Painting Robot (WAHPR)Spearheaded the first prototype of a parking algorithm using relevant mathematical concepts for a robot guidance system to align the WAHPR prior to painting(C++)	

AWARDS AND ACHIEVEMENTS

Dean's List, Nanyang Technological University	Jul 2020 - Jul 2020
<ul style="list-style-type: none">Achieved top 5% of cohort with minimum YGPA of 4.50 for AY2020-2021	
James Dyson National Runner Up (Singapore)	Jul 2020 - Jul 2020
<ul style="list-style-type: none">Led and developed the design of water channeling conduits, from concept to deployment at our prototype vertical farm at Bulim Square.	