Zwe Lin Htet (David)
Electrical and Computer System Engineering Major
Email: zwe.david.htet@gmail.com | **Mobile**: 0459058069 | **Website**: www.david-zwelin.xyz/

Graduate Electrical and Computer Systems Engineer with practical and theoretical skills capabilities in autonomous navigation systems, control systems, and the field of robotics. Proven track record of working independently and in teams, as indicated by multiple experiences in student teams, hackathons and personal projects. Passionate about upcoming AI technologies, machine learning, and sustainable energy.

Education

Monash University, Clayton   (2016 – 2020)
- Graduated with First-Class Honors in Bachelor of Electrical and Computer Systems Engineering
- Dean's Honors List: 82.877 Weighted Average Mark; GPA: 3.656
- Higher Achiever Award
- Monash Summer Research Scholarship Holder

Monash University Foundation Program, Sunway University   (2015 - 2016)
- Jeffery Cheah Entrance Scholarship
- Graduated with 92.75 Weighted Average Mark

Work Experience

Monash University
<u>Research Assistant – Data Collection and Analytics</u>   (November 2019 – Present)
- Performed movement data collection on AFL elite athletes using wearable sensor nodes (IMUs)
- Processed joint angles of athletes' lower body from the raw data collected using MATLAB
- Generated questionnaires to assess elite athletes' states of mind, and level of perception

Volunteering Experience

Monash Nova Rover
<u>Software/Autonomous Engineer</u>   (2019 – Present)
- Propelled the team from 9th place in 2019 to 14th place in 2018, out of 35 competing teams
- Acquired code organization and tracking skills through the use of GIT
- Developed and implemented Path Planning algorithms, and Path Controllers
- Created a Gazebo simulation environment to improve safety for testing purposes.
- Assisted in sensor selection and performance analysis to meet budget plans

IEEE Monash Student Branch   Monash University
<u>Events Manager</u>   (July 2019 - Present)
- Displayed a strong understanding of logical matters, in organizing IEEEXtreme – 24-Hour-Programming Competition for the Victorian Section – for 100 people
- The above and other events involved in creating a schedule and budget and organizing catering
- Exhibited people skills in liaising on joint event proposals from affiliated partners
- Raised awareness of the organization's values and inception
- Awarded 1st place position for being the best student branch in the Victorian Section

Real-Time Learning Australia   Monash University
<u>Robotics Facilitator – Student Mentor</u>   (July 2019 – Sept 2019)
- Supervised 5 primary students on basic coding, CAD, and Robotics
- Ensured smooth operations of the learning and teaching workshop

Digital AI Summit Melbourne   MCEC
<u>Ushering and Registration</u>   (March 2019)
- Contributed to the running and welcome of smooth information sessions
- Trained in event management and organization from Humanitix
- Gained an appreciation for current state-of-the-art AI technologies and its applications

Competitions and Personal Projects

PenguiPi Robot   Monash University
<u>Intelligent Robotics Course</u>   (Aug 2020)
- Trained in EKF Sensor Fusion, Mapping and Localization, Path planning, and artificial intelligence methodologies
- Assembled a fully robotic system to achieve autonomous navigation
- Deployed YoloV5 object recognition system to navigate through obstacle prone environment

Modubrace for Scoliosis Patient   Melbourne University
<u>Hippocratic Hackathon</u>   (July 2019)
- Achieved 1st Place in 5-person team for sustainability, cost-effectiveness, and feasibility
- Integrated Electrical Muscle Stimulation (EMS) into an existing brace design to combat muscle atrophy

Anti-Sleep System   Monash University
<u>Monash University Hardhack</u>   (March 2019)
- Engineered safety system for drowsy drivers by taking in three inputs to monitor sleepiness.
- Deployed a computer vision technique to track eye blinks and yawns, a galvanic sensor for hand presence, and a heart rate monitor to track heartbeats

About Me

Technical Skills	C/C++, MATLAB, Excel, Python, Linux, ROS, PLC
Web & Design	Adobe Photoshop, HTML, CSS, JavaScript, React
Languages	English; Fluent in Burmese
Interests	Analog and Digital Electronics, Web Design, Machine Learning, Robotics, Telecommunication, CAD, PCB Designs