Zwe Lin Htet (David)

Electrical and Computer System Engineering Major

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I am a self-driven electrical engineering student in his final year with a passion for autonomous cars and control systems. I possess proficient data analytics skills in Python and MATLAB, and am well-versed in Robot Operating System (ROS) for robotics application. I also have a proven track record of working independently and in teams, and consistently delivering professional results on time.

About Me

Technical Skills C/C++, MATLAB, Excel, Python, Linux, ROS

Web & Design Adobe Photoshop, HTML/CSS English; Fluent in Burmese

Interests Analog and Digital Electronics, Web Design, Machine Learning, Robotics,

Telecommunication

Work Experience

Monash University

Research Assistant – Data Collection and Analytics

(November 2019 – Present)

- Performed movement data collection on AFL elite athletes using wearable sensor nodes (IMUs).
- Estimated joint angles of athletes' lower body from the raw data collected using MATLAB.
- Developed questionnaires to assess elite athletes' states of mind, mood, fatigue, and level of perception.
- Developing injury risk estimation by analyzing the movement data and athlete self-reports/diaries.

Monash Nova Rover

Software Engineer

(September 2019 – Present)

- Acquired code organization and tracking skills through the use of GIT.
- Developed and implemented path planning algorithms, such as A*, D* and Bug motion, in ROS1.
- Simulated the rover in a Gazebo environment to test the robustness of path planning algorithms.
- Oversaw radio communication between the rover and the base station of operation.

Real-Time Learning Australia

Robotics Facilitator – Student Mentor

(July 2019 – Present)

- Mentored young Australians on the basic coding and robotics skills, and taught the use of Arduinos (computer software).
- Ensured smooth operations of the learning and teaching workshop.

Volunteering Experience

IEEE Monash Student Branch

Events Manager

Monash University (July 2019 - Present)

- Showed a strong understanding of logical matters, in organizing IEEEXtreme 24-Hour-Programming Competition for the Victorian Section.
- The above and other events involved creating a schedule and budget, and organizing catering.
- Exhibited excellent people skills in liaising on joint event proposals from affiliated partners, and raising awareness on the organization's values and inception.

Digital AI Summit Melbourne

Ushering and Registration

Monash University (March 2019)

- Contributed to the running and welcome of smooth information sessions, which helped the whole Summit to run smoothly.
- 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

Anti-Sleep System

Monash University Hardhack

Monash University (March 2019)

- Engineered safety system for drowsy drivers by integrating several sensors that monitors sleepiness.
- Deployed a computer vision method to track eye blinks and yawns.

Byte-by-Byte

Bit by Bit Hackathon

Monash University (August 2019)

- Created an app for Android and IOS which projects food menu items onto Augmented Reality space to increase customers' confidence in the product.
- Learned Swift and Xcode for creating the user interface, and testing and debugging of the IOS app.

Modubrace for Scoliosis Patient

Hippocratic Hackathon

Melbourne University (July 2019)

- Achieved First Place for sustainability, cost-effectiveness, and feasibility, in the integration of Electrical Muscle Stimulation (EMS) into an existing brace design to combat muscle atrophy.

Education

Monash University, Clayton

(2016 - Present)

- Honors Bachelor of Electrical and Computer Systems Engineering
- Dean's Honors List: 84.146 Weighted Average Mark
- 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