

D.M.H. HIRAN SANDESH RAJASURIYA

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A Mechanical Engineering Graduate interested in vehicle power-train development. Recently, been working on renewable energy applications for sustainable transportation.

Research Interests:

Combustion and Environment

Alternative Fuels

Renewable Energy

Mechanical Design

EDUCATION

University of Moratuwa, Sri Lanka

B.Sc. Eng. in Mechanical Engineering (First Class Honors)

Dean's List in Semesters: 4,7,8

Dec 2018 - July 2023

Cumulative GPA: 3.8/4.2

Nalanda College, Colombo 10, Sri Lanka

G.C.E. Advanced Level (Physical Science Stream)

(Top 0.15% out of ~35000, Nationwide university entrance examination)

Jan 2015 - Dec 2017

4As / Z-score - 2.01

WORK EXPERIENCE

Research Engineer - Mechanical

Department of Materials and Mechanical Technology, Univesity of Sri Jayewardenepura

Aug 2023 - Present

Sri Lanka

Trainee Mechanical Engineer

Diesel and Motor Engineering (PLC)

Mar 2022 - Aug 2022

Sri Lanka

PROJECTS/ RESEARCH/ PUBLICATIONS

Renewable Energy Access for Conversion of Tuk-tuks (REACT)

Research Project funded by Innovate UK, collaboration with University of Surrey (UK), Alta Vision Solar (PVT) Ltd (SL).

Aug 2023 - Present

D.M.H.H.S. Rajasuriya, T.P.D. Pieris, N.P. Dassanayaka, W.R. de Mel, H.R. Jayetileke, O.A.P.C. Oruthota, and W.H.P. Sampath; *Assessing the Viability of Renewable Energy Integration in Battery Swappable Conversion Kits for Tuk-tuks in Sri Lanka*, The 8th International Conference on Green Energy and Applications (ICGEA) 2024, Singapore. (Conference presentation, Paper accepted for publication)

D.M.H.H.S. Rajasuriya, T.P.D. Pieris, N.P. Dassanayaka, W.R. de Mel, H.R. Jayetileke, O.A.P.C. Oruthota, and W.H.P. Sampath; *A Feasibility Study of Renewable Energy Access for Battery Swappable Conversion Kit for Three-Wheelers in Sri Lanka*, International Conference on Innovation and Emerging Technologies (ICIET) 2023, University of Sri Jayewardenepura, Sri Lanka.

(Extended Abstract, Conference presentation)

[Conference proceedings](#)

Investigating Vehicle Yaw Stability with Active Steering and Torque Vectoring

Self Initiated Undergraduate Research

Aug 2022 - Present

[Thesis](#)

R.P. Herath, **D.M.H.H.S. Rajasuriya**, N.P. Dassanayaka, U.L.S. Perera, J.R. Gamage; *Vehicle Yaw Stability Control System with Torque Vectoring and Active Front Steering*, Moratuwa Engineering Research Conference 2024 (MERCon 2024), University of Moratuwa, Sri Lanka. (Under review)

Undergraduate Course Projects/ Simulations

[Repository](#)

NOTABLE ACHIEVEMENTS

Winner - Best Presentation in Automotive Track (Graduate) at ICIET 2023, organised by Faculty of Technology, University of Sri Jayewardenepura (SL) Nov 2023

Winner - The Migara Ratnatunga Trust Awards on Industrial Training for University Undergraduates - 2021 / 2022 (Field - Mechanical Engineering) , presented by Institution of Engineers Sri Lanka (IESL) Aug 2023

SKILLS

Programming Languages: C++, MATLAB, \LaTeX


Software: SolidWorks, SolidEdge, Technomatrix Plant Simulation

Languages: English (IELTS Academic 7.5/9), Sinhala (Native)

VOLUNTEER EXPERIENCE / LEADERSHIP

Treasurer - Rotaract Club of Alumni of University of Moratuwa Jul 2023 - Present
Handling financial assests of the organisation. Budgeting and preparation of all financial statements.

Director of Finance - Rotaract Club of University of Moratuwa Jul 2021 - June 2022
Management of large-scale project budgets. Preparation of all financial statements.

Co-Director Environmental Services - Rotaract Club of University of Moratuwa Jul 2020 - June 2021
Coordinating and managing projects carried out under the Environmental Services avenue.
Project Zooxanthellae replantation of corals. [Blog Article](#) 

Examiner/ Laboratory Instructor/ Translator - Sasip Institute, Sri Lanka Dec 2017 - Sep 2018
Worked at the Sasip-Assignment-Centre which conducts mock examinations and provides laboratory facilities to conduct Physics practicals for G.C.E. Advanced Level students.

**References available upon request*