



THARINDU WEERARATHNE

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Gender : Male | Nationality : Sri Lankan | Date of Birth : 21/12/1995 | Civil Status : Married

Education

M.Sc. Engineering (Mechanical Engineering) (Ongoing)

01 Aug. 2023 - Present

Aalto University [Website] · Helsinki, Finland

- Specializing in Product Development and Design
- Minor - Aalto Ventures Program

B.Sc. Engineering (Mechanical Engineering) (Honours)

26 Nov. 2015 - 24 July 2020

University of Peradeniya [Website] · Peradeniya, Sri Lanka

- Graduated with Second-Class (Upper Division) Honours
- Final GPA 3.45 out of 4.0 (150 Credits/ 240+ETC)
- [Transcript] [Academic Rank Certificate] [Degree Certificate]

Employment History

Temporary Lecturer (Full Time) · University of Peradeniya · Peradeniya, Sri Lanka

01 Nov. 2022 - 18 Aug. 2023

- Designing laboratory experiments for undergraduates
- Designing assignments, quizzes, and tutorials

Temporary Instructor (Full Time) · University of Peradeniya · Peradeniya, Sri Lanka

28 June 2021 - 31 Oct. 2022

- Conducting laboratory experiments for undergraduates and high school teachers
- Grading lab reports, assignments, quizzes, and tutorials

Production Executive (Full Time - Permanent) · MAS Intimates · Kandy, Sri Lanka

07 Dec. 2020 - 01 Jan. 2021

- Defining the overall value process to identify and plan how to increase efficiency
- Monitoring delivery requirements daily to achieve customer requirements in order to ensure delivery dates are met

Mechanical Engineer (Internship - Full Time) · Noritake Lanka Porcelain (Pvt.) Ltd. · Matale, Sri Lanka

25 Feb. 2019 - 05 May 2019

- Conducting maintenance work
- Implementing process improvements
- [Report]

Mechanical Engineer (Internship - Full Time) · Sri Lanka Railways · Colombo, Sri Lanka

30 Oct. 2017 - 07 Jan. 2018

- Design implementations for process improvement
- Assisting locomotive repairs
- [Report]

Strengths

Soft Skills

Effectual reasoning, Problem solving, Attention to detail, Team work, Situational awareness

Languages

English (Fluent), Finnish (Beginner), Sinhala (Native), Tamil (Moderate)

CAD & Simulation Software

AutoCAD, NX, Solidworks, Autodesk Fusion 360, SketchUp, Creo, Ansys, Nemoh

Additive Manufacturing

Altair Inspire, MCF Simufact Additive

Illustration Software

CorelDRAW, Adobe Photoshop, Lumion, Adobe Illustrator, Canva

Word Processing

LaTeX, Microsoft Office

Programming

Python (Basic), MATLAB (Basic)

Awards & Achievements

1st Place, Engineeria International Quiz Competition organized by Cadd Center, India [Certificate]

02 Nov 2019

Conferences and Seminars

Wave Energy Symposium · Sri Lanka Marine Renewable Energy Association · IESL, Colombo, Sri Lanka

30 Jan 2020

- Presented the group project on modelling and simulation of a commercially viable wave energy device

Research & Projects

Product Development Project - Valmet - Aalto University [News Article]

Sep. 2023 - May 2024

Aalto University & Valmet · Espoo & Jyväskylä, Finland

- Administrative Lead & a Mechanical Engineer of the project
- Product design to aid the roller changing process of the paper machines

Rigid and Aeroelastic Analysis of Wind Induced Flow Behavior Around Unscaled Tall Buildings using Numerical Techniques [Preprint]

Feb. 2021 - Sep. 2022

University of Peradeniya · Peradeniya, Sri Lanka

- Study focuses on the analysis of the effect of wind loads on the pressure distribution around the Commonwealth Advisory Aeronautical Council (CAARC) building. Results are obtained under three numerical models namely, RANS, Large Eddy Simulation and LES analysis of the fluid domain coupled with two-way FSI to the building and compared with results obtained from a wind tunnel experiment found in the literature

Design of Prototype and Analysis of the Performance of Hull Reservoir Wave Energy Converter (HRWEC) under Random Sea Conditions [Project Report]

May. 2019 - June. 2020

University of Peradeniya · Peradeniya, Sri Lanka

- Designing of a wave energy device in consideration of extreme wave forces using available design computer packages
- Developing as a commercially viable device
- Design of experiments and experimentation
- Coupling of rigid body dynamics with complex fluid forces and finding the dynamics for large angle motions
- Coupling of MATLAB, Ansys and NEMOH software and ocean wave equations

Simulation of Oscillating Wave Surge Converter

June. 2018 - Jan. 2020

University of Peradeniya · Peradeniya, Sri Lanka

- Designing of a wave energy device in consideration of extreme wave forces using available design computer packages
- Developing as a commercially viable device
- Designing the device
- Finding corresponding hydrodynamic coefficients
- Evaluating the performance of the device

Online Specializations and Courses

Renewable Energy and Green Building Entrepreneurship [Certificate]

2021

Duke University · USA

Climate Change and Energy Efficiency for Sustainable Development [Certificate]

2021

University of Moratuwa · Sri Lanka

Wind Energy [Certificate]

2021

Technical University of Denmark (DTU) · Denmark

Municipal Solid Waste Management in Developing Countries [Certificate]

2021

École Polytechnique Fédérale de Lausanne · Switzerland

Engineering Project Management [Certificate]

2020

Rice University · USA

Intro to Digital Manufacturing with Autodesk Fusion 360 [Certificate]

2020

Autodesk · Coursera

Extracurricular Activities

Captain & Vice Captain · Boxing team, University of Peradeniya · Peradeniya, Sri Lanka

2018-2020

Central Province Silver Medalist [Certificates]

- Establishing Boxing in the universities in Sri Lanka after 30 years -2018
- Organizing the first ever Boxing tournament among Sri Lankan universities -2019
- Half colours - 2019 [Certificate]

Active member · Art Society of the faculty · Peradeniya, Sri Lanka

2019 - 2020

Singer/ Drummer/ Guitarist

Volunteer/ Fund Raiser · Engineering Student Union · Peradeniya, Sri Lanka

2016 - 2019

Committee Member · Mechanical Engineering Society, University of Peradeniya · Peradeniya, Sri Lanka

2017 - 2018

DJing · Entropy Club · Helsinki, Finland

2024

Professional Memberships

Associate Member · Institution of Engineers Sri Lanka (IESL) · *Colombo, Sri Lanka*

2020 - PRESENT

The Institution of Engineers, Sri Lanka is the multidisciplinary professional engineering institution in Sri Lanka.

- Membership Number: AM-26657

Member · Engineering Council Sri Lanka (ECSL) · *Colombo, Sri Lanka*

2020 - PRESENT

The Engineering Council of Sri Lanka is Sri Lanka's regulatory authority for registration of engineering practitioners.

- Membership Number: 212963

References

Prof. Prasanna Gunawardane [Website]

PhD, MEng, MIESL, CEng.

(Muroran Institute of Technology, Japan)

B.Sc.Eng.(Peradeniya, Sri Lanka),

Professor,

Department of Mechanical Engineering,

University of Peradeniya,

Peradeniya, Sri Lanka.

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Prof. Kushan Wijesundara [Website]

PhD, MSc.

(University of Pavia, Italy)

B.Sc.Eng.(Peradeniya, Sri Lanka)

Professor,

Department of Civil Engineering,

University of Peradeniya,

Peradeniya, Sri Lanka.

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Prof. Asanga Ratnaweera [Website]

PhD

(University of Melbourne, Australia)

B.Sc.Eng.(University of Peradeniya, Sri Lanka),

Professor/ Head of the Department,

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