

# LASITH DISSANAYAKE

MATERIALS SCIENCE & ENGINEERING (UG)

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## EDUCATIONAL BACKGROUND

### Materials Science & Engineering (UG)

#### University of Moratuwa

2021 - Present

- CGPA - 3.22
- Focusing on Polymer Engineering (Focus Area)
- Reading for a Minor in Pattern Recognition

### Kingswood College Kandy

2005 - 2018

- GCE O/L Examination - 8A, 1B (English Medium)
- GCE A/L Examination - 2A, 1B (Sinhala Medium)

## EXTRA-CURRICULAR ACTIVITIES

### Web Manager

#### Society of Materials Engineering Students

2023, September - Present

### Director of Public Relations Pillar

#### Mora Esports Community

2022 - Present

### Assistant Pillar Head of Public Relations

#### Mora Esports Community

2023-2021

Committee member of the School's Astronomy Club,  
Olympiad Club and the Science Society

Member of the College Chess, Cricket & Athletic teams



[linkedin.com/in/lasith-dissanayake-430853192/](https://www.linkedin.com/in/lasith-dissanayake-430853192/)



<https://github.com/DissanayakeLYB>

## PORTFOLIO WEBSITE

[dissanayakelyb.github.io/LasithDissanayake.github.io/](https://dissanayakelyb.github.io/LasithDissanayake.github.io/)

## SKILLS

- Leadership
- Teamwork
- Problem Solving
- Communication skills
- Prompt Engineering
- 2D Drawings (AutoCAD)
- 3D Modeling (Blender, Solid Edge, SketchUp)
- Programming (Python, C++, C#, MATLAB)
- Machine Learning
- Web Development (HTML, CSS, JS)

## VOLUNTEER WORK

### International Service Director

#### Rotaract Club of Kandy

2021-2022

### Treasurer

#### Rotaract Club of Kandy

2020-2021

## PROJECTS INVOLVED

### Gear Box Design - 2023 (In progress)

Collaborative project involving the design and simulation of a functional gearbox for a vehicle model using Solid Edge software.

Module : Machine Design

Supervised by : Dr. Eranga de Silva (Senior Lecturer - [ahteranga@uom.lk](mailto:ahteranga@uom.lk))

### Investigating a Diffusion Based Approach for Time Since Death Estimation - 2023

Investigated time since death estimation through diffusion-based analysis, using potassium concentration differences in vitreous humor. I developed a Python program to correlate potassium reduction with the time since death.

Module : Kinetics of Materials

Supervised by : Dr. D.A.S. Amarasinghe (Senior Lecturer - [amarasinghes@uom.lk](mailto:amarasinghes@uom.lk))

### Exercise Machine Design - 2023

Contributed to the enhancement of a cyclic exercise machine's productivity and market value through innovative part designs. I utilized Blender for 3D modeling.

Module : Fundamentals of Machine Elements Design

Supervised by : Prof. Nirosh Jayaweera (Senior Lecturer - [niroshj@uom.lk](mailto:niroshj@uom.lk))

### Aluminium Extrusion Die Design - 2023

Collaborative effort to design an aluminium extrusion die, considering factors such as die ratio, tongue ratio, swelling, pressure, temperature control, and material flow. I created 3D designs and animations using Blender.

Module : Ferrous Metals & Alloys

Supervised by : Prof. G.I.P. de Silva (Senior Lecturer - [niroshj@uom.lk](mailto:niroshj@uom.lk))

Mr. G.S. Dhananjaya (Assistant Lecturer)

### Solution to Eutrophication - 2022

Led a team in the design of floating equipment to mitigate water stagnation and combat eutrophication in endangered lakes, targeting the pre-eutrophication period.

Module : Fundamentals of Engineering Design and Workshop Practice

Supervised by : Prof. G.A. Sewwandi (Senior Lecturer - [galhenagea@uom.lk](mailto:galhenagea@uom.lk))

## REFERENCES

Mr. A.M.P.B. Samarasekara  
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Faculty of Engineering  
University of Moratuwa  
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