

# HIKKADUWA LIYANAGE PASINDU MALSHAN

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## SUMMARY

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I am a student studying electrical and electronic engineering who loves learning and figuring out how things work. I enjoy working on real projects and have experience with both software and hardware solutions. I am not only passionate about learning but also about sharing what I know with others. Over the years, I have gained experience in imparting knowledge to my peers. I believe in the importance of spreading information and helping others understand complex concepts. Whether it is through group projects or informal discussions, I take joy in sharing what I have learned to contribute to a collaborative and supportive learning environment. As I have gone through school and university, I have learned how to communicate well, manage my time, and take the lead in projects. I can take on responsibilities and work with little supervision.

## INTERESTS

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Optimization      Machine Learning      Signal Processing      Algorithmic Programming

## EDUCATION

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**University of Peradeniya** *2018 Nov - Present*  
Undergraduate in BSc. Engineering(Hons.) **GPA: 3.81/4.00**

**DeepLearning.AI and Stanford University** *2023*  
Coursera Online Certificate Courses  
Supervised Machine Learning: Regression and Classification  
Neural Networks and Deep Learning

**Kingswood College ,Kandy** *2008 - 2016*  
G.C.E. Advanced Level Examination  
District Rank - 17, Island Rank - 253 **Z-Score: 2.1336**  
Physics (A), Chemistry (A), Combined Mathematics (A)

G.C.E. Ordinary Level Examination  
A passes for all 9 subjects

**Sri Pada College, Hatton** *2003 - 2007*

## ACHIEVEMENTS

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**Undergrad Thesis Project Competition** *2023*  
Organized by IEEE Signal Processing Society Sri Lanka Chapter  
Runners Up

## SKILLS

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<b>Programming Languages</b>	Java, Python
<b>Numerical Computing Packages</b>	MATLAB, Octave, Numpy, R
<b>Hardware Programming</b>	Arduino
<b>3D Modelling</b>	AutoCAD
<b>Design and Multimedia Tools</b>	Adobe Photoshop, Adobe Premiere Pro, Adobe Illustrator
<b>Office Productivity Suite</b>	Microsoft Office Package
<b>Languages</b>	English, Sinhalese

## EXPERIENCE

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### Past Paper TV: Educational YouTube Channel

2021 - Present

Educational YouTube channel for GCE A/L Students which provides theory and past paper discussions  
Has over 49K subscriber count

### GCE A/L Tutoring

2018 - Present

Conducting individual tutoring sessions on Combined Mathematics for numerous advanced-level students

### Pearson Edexcel A/L and O/L Tutoring

2018 - Present

Conducting individual tutoring sessions on Pure Mathematics, Further Mathematics, Mechanics, and Statistics for numerous advanced-level and ordinary-level students

### Sri Lanka Telecom PLC - Trainee Engineer

2022 January - 2022 May

Involved in projects and garnered practical experience in the areas of Fiber Access Network, Copper Access Network

## PROJECTS

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### Multispectral Imaging for Condition Monitoring

2023

- Developed a method to monitor the changes in different substances from multispectral imaging
- *Technologies: Python, Numpy, OpenCV*
- *Techniques: Image Preprocessing (Median Filtering, Bilateral Filtering), Dimension Reduction (PCA, LDA), Data Classification (Logistic Regression, SVM, Decision Tree, KNN), Statistical Parameters (Bhattacharyya Distance, KL Divergence)*

### Smart Key Chain

2022

- Designed and manufactured a comprehensive smart key chain solution for locating misplaced objects
- *Technologies: Arduino Microcontroller, ESP8266 Wifi Module, Android Studio*

### High Speed Traffic Indicator

2022

- Designed and simulated a high speed traffic indicator which can identify vehicles speed and indicate warnings
- *Technologies: PIC 16F877A Microcontroller, IR Sensors, Assembly Language*

## EXTRA-CURRICULAR

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Committee member of Kingswood Science Society (2014 - 2016)

Member of Rotaract Club in University of Peradeniya (2018 - 2021)

Member of Kingswood Information Technology Society (2012 - 2016)

Member of Kingswood Chess Team (2008 - 2012)

Member of Kingswood Baseball Team who were the 2nd Runners Up at All Island School Baseball Tournament 2008 (2008 - 2009)

Special Award for Baseball at Kingswood Colours Night 2009

## REFERENCES

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### Prof. G.M.I.R. Godaliyadda

Senior Lecturer, Dept. of Electrical and Electronic Engineering  
University of Peradeniya  
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### Prof. Vijitha R. Herath

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