



# NIRU FERNANDO

UNDERGRADUATE

## EDUCATION

B.Sc. Engineering (Hons.) in Computer Engineering CGPA - 3.31  
Faculty of Engineering | University of Sri Jayewardenepura, Rathmalana. Mar. 2021 - Present

Maliyadeva College, Kurunegala. 2005 - 2019  
G.C.E Advanced Level, Z-Score - 1.5621  
A/L in Physical Science stream.  
Combined Mathematics: A, Physics: B, Chemistry: B

## EXPERIENCES

Software Engineering Intern at Azbow pvt Ltd | May. 2024 - Nov. 2024

Vue.js, Google-Charts, MySQL, Laravel, PHP, Postman, Github, Gitlab

- Implemented responsive and intuitive user interface for the KPIs dashboard to enhance usability and data visualization ongoing German project.
- Integrated RESTful APIs to enable seamless communication between front-end and back-end for data visualization.
- Developed and managed the back-end infrastructure, ensuring reliable data processing and scalable performance.
- Designed the database schema and created optimized tables to support efficient data storage, retrieval, and analysis.
- Conducted thorough data validation to ensure the accuracy and consistency of all KPI metrics displayed on the dashboard and addressed and resolved multiple bugs.
- Implemented and scheduled cron jobs to automate daily updates of the KPI database, ensuring updates and accuracy.
- Participated in regular client meetings alongside the supervisor and team members to discuss project updates, gather feedback, and ensure requirement alignment.

## PROJECTS

OccluWatch | Dec. 2024 - Present

Python, OpenCV, YOLO, DeepSORT, TensorFlow, PyTorch, PyTesseract, EasyOCR, Flask, Vue.js, MySQL, Twilio, SendGrid

- Designed and implemented multi-CCTV vehicle tracking using DeepSORT and YOLO to resolve visual occlusions.
- Built AI-based rule detection models to identify red light jumps, illegal lane changes, overtaking, and restricted U-turns.
- Applied OCR techniques using PyTesseract and EasyOCR for license plate recognition.
- Automated SMS and email notifications using Twilio and SendGrid.

## CONTACT

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📍 No 03, Singhe MW,  
Muththettugala, Kurunegala.

🌐 [linkedin.com/Niru-Fernando](https://www.linkedin.com/Niru-Fernando)

🐙 [github.com/alaw-bot](https://github.com/alaw-bot)

## TECHNICAL SKILLS

- Programming Languages - C++/C#, SQL, HTML/CSS, PHP, JavaScript, Python
- Frameworks - Vue.js, Laravel, Tensorflow, Keras
- Libraries - Pandas, NumPy, Scikit-learn, Matplotlib
- Developer tools - Unity, VS Code, Visual Studio, IntelliJ IDEA
- Familiar Operating Systems - Windows, Ubuntu

## LANGUAGES

- English (Fluent)
- Sinhala (Fluent)

## INTERESTS

- Career - Machine Learning, Artificial Intelligence, Computer Vision.
- Other: Cricket, Football, E-Sports

# CONCEPTS

- Object Oriented Programming
- Data Structures and Algorithms
- Data mining
- Natural Language Processing
- Machine Learning
- Database Management Systems.
- Computer vision and Image processing.

# REFERENCE

Dr. Udaya Wijenayake  
Head of the Department  
Department of Computer Engineering  
Faculty of Engineering  
University of Sri Jayewardenepura  
Email: udayaw@sjp.ac.lk  
Phone: +94 76 465 5928

Mr. Tharindu Udan  
Specialist Engineer  
Reliability Engineering  
London Stock Exchange Group  
Phone: +94 71 4140211

- Developed a web platform using Flask (backend) and Vue.js (frontend) for drivers to view violations and manage profiles.
- Managed and annotated datasets for model training and evaluation under various environmental conditions.

Predict-Lend | Jan. 2024 - Jan. 2025

Vue.js, Google-Charts, MySQL, Laravel, PHP, Postman, TensorFlow, Keras, ML Algorithms

- A web application for calculating risks of loan approval process. Includes loan application submission, risk analysis, and credit score calculations.
- Machine Learning techniques are used for loan eligibility predictions & recommendations.
- Dashboard is implemented with filters for evaluating agents and customer segmentation, which includes filters and various types of charts for data visualization.

Space-Sync | Jul. 2023 - Nov. 2023

Unity, c#, Google Cloud

- An Augmented Reality (AR) furniture mobile application that utilizes AR technology to enhance the furniture shopping experience developed using Unity and C#.
- Implemented floor detection, depth analysis, rotations and object placements.
- The admin can upload and update the app with new furniture 3D models to cloud storage.

inPath | Jan. 2023 - May 2023

HTML, CSS, JS, LogisticRegression, NodeJS, MongoDB Atlas Cluster

- Web application for students and lecturers to manage student exams efficiently.
- Integrated a system to randomize the exam hall desks numbers.
- Implemented QR code technology for updating attendance seamlessly within the application.
- Machine Learning is utilized to analyze past student's results and recommendations are done for choosing the suitable field of study.

# LEADERSHIP EXPERIENCES

- Junior Treasurer Computer Engineering Society (Censco) 2023 - Present
- Social Media Team Leader -ENIGMA Exhibition Jan.2024 - March.2024
- Public & Relations Team - Project Thaprobane 2024 - Present
- Director - Interact Club Maliyadeva College 2017 - 2018

# ACHIEVEMENTS

- 2016 Best Offensive player, football under 15- Colors Night
- 2013 Debating competition 2nd round winners
- 2013 All island fourth place - Football
- 2011 - 2017 Football provincial Champions
- 2009 - 2011 School chess team