

Treshan Appuhamy

Electrical & Computer Systems Engineer

📍 Colombo, Sri Lanka

☎ +94 76-606 8695

✉ treshanappuhamy@outlook.com

📅 Date of Birth: 20/01/2001

🎂 Age: 23y



EDUCATION

B. Eng (Hons) (Electrical & Computer Systems)

Monash University Malaysia

July 2020 - July 2024

Grade: Second Class (Honours)

Thesis: Holistic Approach for Electrical Power Cable Sizing

Pearson Edexcel International Advanced Level

Gateway College Negombo

July 2017 - July 2019

Coursework: Mathematics, Further Mathematics, Physics & Chemistry

SKILLS

- | | | |
|-----------------------------|--------------|-----------|
| • PSSE | • MATLAB | • AUTOCAD |
| • Power Factory | • MS Office | • MEP |
| • Electrical Fault Analysis | • LTSPICE | • C/C++ |
| | • SOLIDWORKS | • VHDL |

ACHIEVEMENTS

- Addressed power cable sizing issues in Malaysia, developing a holistic approach with high commercial value.
- Reduced the electricity bill by 16% after conducting an energy audit.

EMPLOYMENT

Graduate Electrical Engineer

Sept 2024 - Present

Diesel & Motor Engineering

Colombo, Sri Lanka

- Lead Project Engineer for the Public Address System (PAS) at the Casino, Waterfront Integrated Resort by Cinnamon Life. Assisted in Security Access (CCTV) systems for the base building.
- Oversaw project execution, ensuring compliance with budgets, timelines, and quality standards. Coordinated with clients, consultants, and subcontractors to facilitate smooth operations and resolve on-site challenges. Managed procurement processes, material approvals, and subcontractor claims while maintaining accurate records. Monitored site safety and ensured adherence to company policies and regulatory standards. Achieved project targets, including profitability and positive cash flow against Work in Progress (WIP) costs. Collaborated with internal and external stakeholders to streamline workflows and enhance project efficiency.

Research Intern

June 2023 - July 2023

Monash Warwick Alliance

Selangor, Malaysia

- Developed a model for risk management for financial services by developing credit and climate risk models, using specific data to enhance the stability & reliability of financial institutions by 11%.

Electrical Engineering Intern

Nov 2022 - Feb 2023

Selangor Human Resource Dev. Centre (SHRDC)

Shah Alam, Malaysia.

- Integrated LiDAR sensors and PLCs, which optimized industrial operations, resulting in approximately 20% increase in operational efficiency.
- Utilized MQTT for machine communication, improving industrial workflow, achieving a faster data transfer rate.

- Developed a SCUTTLE AGV robot and a Python-based decision-making processes using ROS with real-time LiDAR data, which can be used in the industry to carry heavy loads.
- Developed an automated Node-RED program which enabled industrial machinery control via WhatsApp & Siemens PLC, streamlining tasks and enhanced industrial efficiency by 40%.

PROJECTS

Holistic Approach for Electrical Power Cable Sizing

- Focused on ESG concerns, ROI, cable lifespan, and preventive maintenance. Addressed financial stakeholders' interests.
- Collaborated with a leading power cable manufacturer in Malaysia.

Energy Audit for a Residential Unit

- Identified major electrical energy-consuming appliances in Kenwingston Skylofts. Recommended behavioral adjustments & technological upgrades to reduce energy usage.
- Cost: RM 282; Savings: RM 28.04 monthly, RM 336.48 annually; Payback: ~10 months. Impact: 16% reduction in electricity bill and CO₂ emissions.

Monash Malaysia Color-Bowl 2023

- Designed and implemented PID speed control for autonomous robot. Constructed circuit for speed measurement with encoders and PWM motors.
- Added autonomous driving using ultrasound and IR sensors. Implemented PID steering control. Design and construction from SOLIDWORKS to 3D printing.

TECHNICAL TALK BY ME

"Holistic Power Cable Sizing: Addressing Issues and the approaches" – Technical Seminar organized by a cable manufacturer in Malaysia on the 08/06/2023

REFEREES

Timal Hemarathne
Project Manager
Building Technologies,
DIMO (PVT) LTD
timal.hemarathne@dimolanka.com
+96 76-987 2660

Ir. (Dr.) S. Vignaeswaran
Founder
Vigs Consultancy,
Malaysia
vigs.hp@gmail.com
+60 12-998 1965

Ir. Ts. Dr. Charles R. Sarimuthu
Senior Lecturer
Electrical & Robotics Engineering
Monash University
charles.raymond.sarimuthu@monash.edu
+60 35515 9732