

Nilesh Amarathunge

• 408/9, Pinwalapitiya Watte, Bamunawala, Kurunegala.

✉ nileshamarathunge@gmail.com 🌐 NileshAm in Nilesh Amarathunge ☎ +94767706176

🌐 <https://portfolio.nilesh.uk/>

Updated: February 22, 2026

Statement

I am a passionate and driven individual with a strong interest in machine learning, robotics and embedded systems. I am constantly seeking to expand my knowledge and skills through continuous learning, staying up to date with the latest advancements in technology to contribute to innovative and impactful solutions.

Education

University of Moratuwa

BSc.(Hons) in Electronics and Telecommunications Engineering.

- Dean's list (CGPA : **3.8817**)

Moratuwa, Sri Lanka

2024 - Present

National Institute of Business Management.

Diploma in Software Engineering.

- Distinction pass with GPA **3.911**

Kurunegala, Sri Lanka

2023 - 2024

Maliyadeva College.

GCE Advanced Level in physical science stream

- Combined Mathematics : **A**, Physics : **A**, Chemistry : **A**, General English : **A**
- Z-score : **+2.2132**

Kurunegala, Sri Lanka

2009 - 2023

Projects

Team N1K0 – Micromouse

Micromouse Robotics Competition Project

- Designed and manufactured a competitive micromouse for SLIIT Robofest 2025.
- Led full mechanical system design including chassis, drivetrain, and assembly.
- Designed a compact high-reduction (1:6) gear system for coreless motors.
- Performed full mechanical assembly and validation for smooth motor control.

2025 – Present

Project link: portfolio.nilesh.uk

Analog Noise Cancelling Headphones

Analog Electronics Product Design

- Led a team to design and prototype an analog noise-cancelling headphone system.
- Designed complete analog circuitry including noise reduction and volume control.
- Created PCB layouts using Altium Designer and assembled the full prototype.
- Tested and validated circuit performance under real-world conditions.

2025 – 2026

Project link: portfolio.nilesh.uk

Team Lynx – Battle Bot

2025 – Present

Combat Robotics Competition

Project link: portfolio.nilesh.uk

- Led a multidisciplinary team to design and manufacture a battle bot for RoboGames 2025.
- Designed a horizontal spinning blade weapon driven by a high-power DC motor.
- Completed full mechanical and structural design prior to manufacturing.
- Competed at RoboGames 2025 hosted by the University of Moratuwa.

Falcon E-racing

2025 – Present

Formula Student Competition

- Falcon E-racing is the Formula Student group established in University of Moratuwa
- Volunteering at Falcon E-racing group as an low voltage engineer.
- Designed and manufactured the PCB's and wired the battery cart which handles charging the battery.

ThermoBand

2025 – 2026

Wearable Medical Device Product Design

Project link: portfolio.nilesh.uk

- Collaborated with electronics engineers to develop a consumer-ready wearable device.
- Designed enclosure optimized for comfort, durability, and manufacturability.
- Integrated sensors and electronics into final assembled product.
- Device enabled continuous body temperature monitoring and historical data tracking.

E-Commerce Web Application

2023 – 2024

Full-Stack Web Development Project

GitHub: [Frontend](#), [Backend](#)

- Led a team of three to design, implement, and deploy a full-stack e-commerce platform.
- Developed inventory management system for store employees.
- Implemented customer-facing features including browsing, ordering, and payments.

Skills

Languages

- Python (Proficient)
- C++ (Proficient)
- Java (Novice)

Other

- SolidWorks (Proficient)
- Altium Designer (Proficient)

Awards and Experience

Robotic Minds Competition

2015

1st place in National level Robotics Competition.

National Level Inventors Competition

2014 - 2015

1st, 2nd and 3rd places in national and provincial level invention competitions.

* "Sahasak Nimavum", held by SLIC, Ministry of Education, Sri Lanka.

National Level Stamp Exhibition

2017

1st place in the National Stamp Exhibition organized by the Philatelic Bureau of Sri Lanka.

Extra Curricular

Member in Electronic club, university of Moratuwa.

2025

Web developer under the public relations branch of E-Club.

Board member in Philatelic Society.

2021

Vice Secretary of Philatelic Society, Maliyadeva College.

Board member in Inventors Club.

2021

Treasurer of Inventors Club, Maliyadeva College.

Scout

2012 - 2020

Active member of the Scout Troop at Maliyadeva College.