CONTACT

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Address: No.28, Gannoruwa, Peradeniya.

Web: amilalex.vercel.app (Past Projects & Experience)

HIGHLIGHTED SKILLS

Soft skills

- Problem-solving
- Critical thinking
- Creativity
- Adaptability
- Teamwork
- Willingness to learn
- Good communication skills

Hard skills

- Bilingual *

English	9
Sinhala	9

- Programming Languages *

JavaScript	8
Python	8
Java	8
C#/C++	8
MATLAB	8
R	6
HTML/CSS	6
SQL	5

- Software Proficiency *

SOLIDWORKS Design	8
Arduino Studio	8
Atmel Studio	7
Android Studio	8
AutoCAD	6
EasyEDA PCB Designer	6
Proteus Professional	5
Basic Adobe Suite	7
Firebase	7
MongoDB	6

* proficiency level out of 10

ABOUT ME

An honors student with high academic performance and an adaptive skillset. Experienced with extensive leadership skills and is also a team player.

EDUCATION

RMIT University – Saigon South Campus | Feb 2019 - Present
BSc Engineering (Hons.) Mechatronics Engineering
*Expecting Degree in 2021 (**GPA 3.3**)*

Sri Lanka Technological Campus (SLTC) | 2018 - 2019
BSc Engineering (Hons.) Mechatronics Engineering

South Asian Institute of Technology and Medicine (SAITM) | 2017 - 2018
BSc Engineering (Hons.) Mechatronics Engineering

Trinity College Kandy | 2007 - 2016
Secondary Education
Advanced Level Examinations – Mathematics: S, Chemistry: C, Physics: C
Ordinary Level Examinations – 7A, 1B, 1C

St. Michaels Catholic School (Guelph, Canada) | 2002 - 2007
Primary Education

EXPERIENCE

Academic Projects

- Robotics Projects
  - Mechanical Robotic Arm (7 weeks)

Designed to pick and place a metal ring powered by hydraulics (syringes).

  - Automated Pick and Place Robot Arm (7 weeks)

Powered by servo motors and programmed using an Arduino Board.

  - Grid Traversing Robot (14 weeks | group project)

A robot with the task of scanning through a grid and detecting obstacles.
Designed using fabricated PCB's which were designed manually.

  - Compost Sifter and Trommel (7 weeks)

Built in the workshop with the aid of powered tools, lathe, welding torches etc.

  - Computer Vision Powered Robot (3 months | group project)

Design of a robotic rover capable of completing following objectives:

a. Manual Control - Wirelessly via Android App
b. Automated Path following
c. Color detection and parking
d. Programmed using combination of Java, C++ (Arduino) and Python with OpenCV computer vision. Including RaspberryPi and Arduino integration.

  - CNC Milling Project (1 month)

Using Solidworks and other software to generate g-code files to mill pre-defined patterns on a plastic block.

  - Automated System Programming (3 months | group project)

Programming scaled down automated system of a factory/plant which simulates a production line. Intro to pneumatic devices and different types of valves, etc.

HOBBIES

- Reading
- Creating YouTube content
- Coding
- Playing the piano

- Programming Projects
  - Java based Clock (1 week)

Intro to GUI design in basic programming languages.

  - ‘Battleship’ Game using Embedded Systems (1 month)

Game of battleship was programmed on Atmega328 on a development board using Atmel Studio.

  - Ride Sharing App (1 month)

Programmed on Android Studio. App designed to enable ride sharing of vehicles among campus community.

  - Garbage ‘Cleanup’ App (1 month)

Android programming. App designed for crowd sourcing garbage collection. Map shows where clean sites are located, and users can join/host.

- Research Projects

Data Collection and Research (3 months | group project)

Analysis and research of a large dataset of ‘bicycle routes in Toronto’ using R .