Bimsara Gunawardana

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Education

University of Colombo

Bachelor of Engineering Technology Honours in Instrumentation and Automation (ug)

Jun. 2022 - Present

Colombo, Sri Lanka

Sri Lanka Institute of Robotics (SLIR)

PLC Programming

Nov. 2022 – Apr. 2023

Pannipitiya , Sri Lanka

Nalanda College GCE Advanced Level - Technology stream - 4A passes with a Z - score of 2.6405 Feb. 2013 - Oct. 2020

Colombo, Sri Lanka

GCE Ordinary Level - 8A passes and 1B pass (including A in English and Mathematics)

Relevant Coursework

• Embedded Systems

• 3D Modeling and CAD

Robotics

• Computer Architecture

Digital Circuit Design
 Micro-controllers

• FPGA

• PLC programming

Experience

VirtualPensar Pvt Ltd

Co-Founder and Director.

 $Jun.\ 2022-Jul.\ 2024$

Colombo, Sri Lanka

• Delivered over 60 projects, including 3D-printable designs, prototype models, and 3D animations.

Lautus Robotics

Technical Team Member

Aug. 2021 – Feb. 2022

Gampaha, Sri Lanka

• Significantly contributed to the development and implementation of an autonomous guided vehicle, with the design and manufacturing efforts while gaining valuable hands-on experience in autonomous systems.

Students for the Exploration & Development of Space Sri Lanka (SEDS) Sep. 2023 – Present

Technical Team Member Colombo, Sri Lanka

• Contributed to the Thaprobane 4.0 Mars rover project by focusing on the development of the manipulator arm, participating in kinematic calculations, and designing arm joints as part of a multidisciplinary team.

Projects

Smart Mailbox - Sahasak Nimavum 2023 Silver Award | Leadership, Teamwork

Sep. 2023

 Led a team to develop an award-winning smart mailbox system, providing real-time notifications and secure parcel management.

Automated Runway Cleaning Rover - Lautus Robotics | Problem-solving, Teamwork

Feb. 2022

• Contributed to the initial phase of developing an autonomous guided vehicle aimed at cleaning airport runways, focusing on foundational design and prototyping.

CPU Design and Simulation | Critical thinking, Curiosity

Feb. 2024

• Designed and simulated a CPU with an ALU and 64-byte RAM, applying skills in digital electronics and computer architecture.

Micro-controller-Based Temperature Monitoring System | Leadership, Conflict Resolution

Aug. 2024

• Led a team to develop a temperature monitoring system with an ATmega328P, featuring dual display, alarms, LED indicators, and push-button controls, while managing the design, PCB layout, and hardware assembly.

Automated 3D Printing Platform (Ongoing) | Leadership, Project Management

Oct. 2024

• Leading the development of an automated 3D printing platform that enables seamless model uploads and automatic pricing, focused on streamlining workflows and enhancing accessibility for efficient 3D printing services.

Technical Skills

Languages: Python, C , HTML/CSS, JavaScript, PHP, VHDL , SQL, MATLAB , Ladder Logic

Developer Tools: VS Code, EasyEDA, Git

Technologies/Frameworks: React , Arduino, Raspberry Pi, AWS

3D Design/Simulation: SolidWorks, AutoCAD, Autodesk Inventor pro, Blender, ORCAD, Logisim, Proteus

Leadership & Extracurricular Activities

Nalanda College Aeronautical Society

2018 - 2019

Vice President

University of Colombo Swimming Squad

May 2024 - Present

Active member of the university swimming Squad

Inter faculty and Freshers Badminton Competitions

2023

Won 1st runners-up in both Freshers' and Inter faculty championships.

UOC Venturers

Jun. 2024 – Present

Member

References

Dr. B. L. Sanjaya Thilakarathne

Senior lecturer

Department of Instrumentation and Automation Technology

Faculty of Technology

University of Colombo, Sri Lanka

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Chanaka Prasad

Electronic Engineer (Assistant Manager) Softmatter

BSc Engineering(Hons)

MSc(Reading)

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