Electronic | Embedded Systems | AI Expert

Madusha Suraweera

Engineer with over 4 years of expertise in Electronics and Embedded Systems, including 2 years of hands-on experience in Al.

CONTACT DETAILS

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WEB SITE

• # madushasuraweera.com

KEY SKILLS

- Embedded Systems:
 - Microcontroller: (Arduino, Raspberry Pi, NodeMCU)
 - FPGA Programming: (VHDL, Verilog)
 - Programming Languages: (Python, MATLAB, C, C++)
 - Additional Skills: RTOS, IoT, ESP32, ESP8266
- · Hardware Design:
 - PCB Design: (Proteus, Altium)
 - Simulation Tools: (LTspice, SOLIDWORKS)
- **Protocols:** I2C, SPI, UART, CAN, Bluetooth, WiFi, USB.
- **EDA Tools:** Xilinx Vivado, ModelSim, Quartus.
- **Debugging Tools:** JTAG, Logic Analyzers, Oscilloscopes.
- AI/ML Tools: TensorFlow, PyTorch, LangChain.
- Tech Stack: Python, JavaScript, AngularJS, ReactJS, NodeRed, SQL, Neo4J, REST API.
- Version Control: Git, GitHub, Azure DevOps.
- Project Tools: Jira, Asana.

REFERENCES

Dr. Mahima Weerasinghe

Senior Lecturer, SLIIT Phone: +94 70 462 2552 mahima.w@sliit.lk

Mr. Maduka Ashan Perera

Associate Tech Lead, OKLO Pvt. Ltd Phone: +94 71 643 5056 maduka.ashan@gmail.com

EDUCATION

MSC IN EMBEDDED SYSTEMS AND IC DESIGN 2023–2025
Liverpool John Moores University, UK

MENG IN ELECTRONIC AND ELECTRICAL ENGINEERING
University of West of England, UK
Degree Class: Second Class Division 1 (Merit)

PROFESSIONAL EXPERIENCE

IPD Colombo (Pvt) Ltd Colombo 05, Sri Lanka 01/2023 – Present Embedded Engineer – Al

- Working on IPD projects in Australia.
- Designing and implementing AI and IoT solutions, such as Building Management Systems (BMS) and chatbots.
- Conducting RnD initiatives using platforms like Arduino and Raspberry Pi.
- Streamlining development processes by leading CI/CD operations.

East Link Engineering Company (Pvt) Ltd Colombo 05, Sri Lanka 09/2021 – 12/2022

Electronic Engineer

- Worked in the RnD Division, focusing on ATMs, vending machines, and kiosks.
- Spearheaded RnD projects, including:
 - Cinnamon Processing Machine (CPM)
 - Recycle Material Buying (RMB) Vending Machine
 - Liquid Volume Measuring (LVM) Vending Machine
 - Self-Weighing Station (SWS) Machine
 - Solar Experience Center and EV Charging Station
- Led the RnD Division as a technical lead, managing crossfunctional teams.
- Designed and debugged PCBs to optimize hardware functionality.

East Link Engineering Company (Pvt) Ltd Colombo 05, Sri Lanka 03/2021 – 09/2021

Assistant Electronic Engineer

- Supported the RnD Division in developing ATM, vending machine, and kiosk technologies.
- Performed PCB design and troubleshooting to ensure system reliability.

SriLankan Airlines Katunayake, Sri Lanka **10/2019 – 01/2020** Trainee Engineer

• Gained hands-on experience in the Engineering Department, specializing in technical services and avionics workshops.

Piramal Glass PLC Horana, Sri Lanka **09/2018 – 12/2018** Trainee Engineer

- Assisted in the Electronics Division, focusing on instrument and electrical workshops.
- Led a project to minimize wastage in coating machine operations, improving production efficiency.