Ghazzaly Sahib Umair Ahmadh

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BSc Electrical and Electronic Engineering graduate with expertise in advanced electronic hardware and firmware design. Proficient in RTL/logic design, firmware development for microcontrollers and embedded systems, and low-level software development. Skilled in PCB layout, signal integrity analysis, and high-speed design techniques. Collaborative team player committed to pushing the boundaries of innovation in electronic design. Excited to contribute to impactful research and cutting-edge product development in electronic hardware.

Education

B.Sc. Eng (Hons) in Electrical and Electronic Engineering

Oluvil, Sri Lanka 2015 - 2020

South Eastern University of Sri Lanka

Skills

Electronic Design Eagle, KiCAD & Altium

Digital Design and Verification System Verilog, TCL, Synopsys Tools (Spyglass Lint, CDC & RDC, DC, VCS,

Verdi), Xilinx Vivado

Software Development React-Native and Flutter Mobile App development, WordPress, PHP based web-

site / Web app development, Django/Flask

Programming C/C++, Python, Javascript, PHP, MATLAB

Other Git, LATEX, AWS

Soft skills Customer Support, Communication, presentation, teaching, teamwork & leader-

ship

Work Experience

Senior Engineer, Applications Engineering

Applications Engineer II

Applications Engineer I

Synopsys Inc. (Electronic Design Automation Company)

(February 2024 - **Present**),

(June 2022 - January, 2024),

(September 2020 - June 2022)

(Colombo, Sri Lanka)

- Synopsys Spyglass and VC Spyglass support: Lint, CDC, RDC verification.
- Proficient in hardware description languages: Verilog, System-Verilog.
- Experienced with scripting languages: Python, TCL, Perl, Shell.
- Skilled in verification environment setup, analysis, and pre-release quality assessment.
- Proficient in Linux administration.
- Onsite testing, debugging, and release migration.
- Track customer and internal R&D issues through Solvnet and JIRA.

Electronic Hardware Design Engineer Fiverr, Upwork

Remote, Freelance January 2017 - Present

- Collaborated globally on PCB design using Altium Designer and KiCad.
- Conducted consultations to understand project requirements and hardware specifications And validated designs through prototyping (soldering, oscilloscope testing) to ensure quality.
- Maintained excellent client communication, providing prompt updates and support while Negotiating pricing with a focus on service quality and continuous improvement.
- Stayed current with industry trends, integrating cutting-edge technologies for optimized hardware design processes.

Instructor at The Department of Computer Science and Engineering South Eastern University of Sri Lanka

Oluvil, Sri Lanka March 2020 - August 2020

- Conducted and assisted in laboratory practices for modules Computer Architecture, Programming, Operating Systems, Digital Electronics and Data Structures and Algorithms.
- Redesigned faculty Website and hosted on campus server and Worked on Business Project Management system development.
- Developed Flutter based Android application for inventory management.
- Skillset: PHP, MySQL, Android, Flutter, HTML, CSS, JavaScript, Object Oriented Programming, Version Control (GIT)

R&D Engineering Intern VeroxLabs (Private) Ltd

Colombo, LK November 2018 - February 2019

- Developed and implemented Controller Area Network (CAN) protocol for IVF clinic medical devices
- Developed a document management system
- Skillset: ATMEL Studio, SAM4E Microcontroller, Controller Area Network, C++, Inter Device Communication, Plug-and-Play device address assignment, PHP, MySQL Database, MediCAN

Electronic Engineering Trainee Vega Technologies (pvt) LTd

 $\begin{array}{c} {\rm Colombo,\ LK} \\ {\rm March\ 2017\ -\ June\ 2017} \end{array}$

- Designed a circuit board for the company's Electric car's thermal management
- system with Controller Area Network connectivity. Additionally, a temporary cooling pump controller and logging device were designed to make the car operational.
- Proficiently utilized Eagle Circuit Schematic and PCB Designing and Routing to
- produce a fully functional circuit board.
- Successfully utilized ATMEGA Microcontrollers, Controller Area Networks, Temperature
- sensors, and temperature-based motor speed controllers to ensure optimal performance.

Publications

• Vision based indoor navigation system using external camera mounted on room — Link

Professional Affiliations and Activities

- Associate member of Institute of Engineers, Sri Lanka
- Associate Member of Engineers Councils, Sri Lanka

References

- References will be provided upon request