V KRISHNANUNNY

VLSI Design Engineer

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Profile

Innovative Electronics Engineer specializing in VLSI design, FPGA development, and Verilog programming. Experienced in logic design, RTL coding, and simulation, with proficiency in Xilinx Vivado, ModelSim, and Cadence Virtuoso. Skilled in synthesis, timing analysis, and power optimization, with a strong foundation in digital system design. Quick to adapt and eager to expand expertise in verification, structural design, and analog design. Currently pursuing an M Tech in VLSI Design, focusing on digital system optimization, hardware development, and gaining hands-on exposure to SoC design principles.

Internships

Instructional Designer, Ammachi Labs

2024 | Kollam, India

An organization focused on technology-based learning solutions.

- Designed and developed technical content for NIMI.
- Performed quality analysis,
- Created engaging learning experiences, showcasing strong analytical skills.

Embedded systems and IoT Intern, Amrita Wireless Networks and Applications.

01/2023 - 12/2023 | Kollam, India

A research and development lab specializing in wireless communications.

- Expertised in the field of embedded systems.
- IOT based hardware development

IoT Hardware Intern, KELTRON

2022 - 2022 | Kochi, India

A leading manufacturer of electronic products.

- Diagnosed system issues, designed electronic devices and software.
- Developed advanced structural and system design options.

Education

M Tech (VLSI Design), Amrita School of Engineering

2024 - 2026

• CGPA 8.2

Btech (Electronics and Communication),

2020 - 2024 | Kollam, India

Amrita School Of Engineering

• CGPA 7.54

Higher Secondary School,

2018 - 2020 | Mavelikara, India

Kunnam Government Higher Secondary School

• SCORE 94%

Matriculation, Crossland Public School

2012 – 2018 | Mavelikara, India

• CBSE SCORE 85%

Technical Skills

Verilog • FPGA • STA • Digital Electronics • IoT • Embedded C • Arduino • C programming • Python

Softwares

Xilinx Vivado • Modelsim RTL simulator • Cadence Virtuoso • LT Spice • Keil Vision 5 • MATLAB • TinkerCad • Arduino IDE • Proteus Design Suite

Projects

FPGA Implementation of Reprogrammable Galois LFSR.

11/2024 - 12/2024

• Implemented a galois LFSR that generates pseudo-random sequences and can be reconfigured for specific cryptographic, testing, or error-detection applications.

Design Low Power and High Speed Carry Save Adders

 An optimized Carry Save Adder (CSA) architecture enhances computational efficiency by reducing propagation delay and power consumption, making it well-suited for high-performance and powerconstrained applications.

Drunk and Drowsiness Detection (ADAS) in Automobiles

2024

- An IoT-based system detects alcohol impairment and drowsiness using smell, facial recognition, and behavior analysis.
- Enhancing safety with lane and crash detection.

Automatic Home System

2021

• Technology for centralized home automation, controlling lighting, temperature, security, and entertainment to enhance convenience, energy efficiency, and security.

Courses

Full stack development (Python), CADD Centre

2024 | Alappuzha, India

Python Basics, HackerRank (Online)

2023

Google Project Management, Coursera (Online)

2021

Community Outreach

Amrita LIVE IN LABS

2023 | Noida, Uttar Pradesh, India

- Gained exposure to Human-Centric-Designs .
- Developed leadership and communication skills through projects.

National Service Scheme(7 Days Residential Camp)

2018 | Alappuzha, India

• Developed leadership qualities and a democratic attitude.

Publications

Drunk and Drowsiness Detection For ADAS,

2024

GRENZE Scientific Society

• Authored a publication in a scientific society on Drunk and Drowsiness Detection For ADAS.

Interests

Travelling, playing cricket, football, swimming, always searching about the new trends in techspace.

Languages

Malayalam • English • Hindi