Hemanth Kalaiyappan

Aspiring VLSI DFT Engineer

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Github: github.com/Darokcamper

Summary

Final year ECE student at SVCE, aspiring DFT Engineer. Building skills in Verilog, ASIC/FPGA, RTL, DFT. Designed a RISC-V processor. Eager to innovate in semiconductors.

Education

Bachelor of Engineering in Electronics and Communications Engineering

Sri Venkateswara College of Engineering | 2022 - Present

CGPA: 8.23

YRC Member, organized blood donation camps

Senior Secondary Education - Mathematics and Computer Science

Maharishi International Residential School | 2020 - 2022

Percentage: 73.2%

Secondary Education

ABS Vidhya Mandhir | 2012 - 2020

Percentage: 91.33%

Projects

TL-Verilog – RISC-V Architecture

- Designed and implemented a custom RISC processor in TL-Verilog using MakerChipTool, integrating ALU, register file, instruction decoder & memory interface.
- Debugged and refined processor architecture using simulation tools to optimize performance.
- Focused on high-level abstraction, modularity, and efficient hardware description.

Arduino Weather System

- Designed and developed a weather monitoring system using Arduino, integrating sensors for temperature, humidity, and pressure (e.g., DHT11, BMP180).
- Implemented data acquisition and processing with Arduino IDE, displaying real-time readings on an LCD or serial monitor.
- Debugged and optimized sensor integration and code efficiency using simulation and testing tools, ensuring reliable performance.

Certificates

- Verilog HDL: VLSI Hardware Design Comprehensive Masterclass - Shepard Tutorials (Udemy)

- NIELIT: VLSI Design Flow (RTL to GDS-II)

- Blockchain, Git & Python Foundation Courses - Infosys Springboards

- Verification Series Part 1: SystemVerilog Essentials – Kumar Khandagle (Udemy)

Skills

Verilog| TL-Verilog | Digital Electronics | DFT | RTL | Computer Architecture | C/C++ | Python | Github

Languages

English: Expert | Tamil: Proficient | Hindi: Basic

Tools

Cadence Virtuoso | Cadence Genus | Xilinx Vivado | Yosys | Icarus Verilog | Makerchip | Arduino IDE