Neeraj premkumar
Electronics and Communication Engineer

I am an Electronics & Communication Engineer with a strong passion for digital design and a solid foundation in Programming. I am seeking an opportunity to apply my technical skills, academic knowledge, and training in a challenging role.

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Thrissur, Kerala 📍

linkedin.com/in/neeraj-premkumar-53577a205 in

github.com/TECH-BOY987/codes.git ⃝

EDUCATION

PG Diploma in Advanced VLSI Design and Verification
Ibis Academy

07/2024 - 03/2025   *Thrissur, Kerala*

Courses
- Simulation and Debug
- Data Structures and Algorithms
- Functional Verification
- OOP

B.Tech in Electronics and Communication Enigineering
APJ Abdul Kalam Technological University

06/2020 - 05/2024

Courses
- Digital System Design
- Electronic Devices and Circuits

Intermediate (HSE)
NSS VHSS Mundathicode,Thrissur

06/2018 - 04/2020

Secondary School (SSLC)
Nirmala High School Kundukad,Thrissur

06/2017 - 04/2018

POSITION OF RESPONSIBILITY

Sub - Coordinator
PC Building Conducted as part of Techno-cultural fest

02/2024 - 03/2024

The Techno Fest aims to provide a platform for participants to develop technical skills, innovate, and have fun through PC Building Simulator.

Achievements/Tasks
- Assisted in organizing and conducting the PC Building event as part of the Techno-cultural fest.

Volunteer
Ligarobotrix Conducted as a part of Techno-cultural fest

04/2022 - 04/2022

Aims to make use of Arduino-based remote-controlled cars to navigate obstacles and complete tasks, showcasing their robotics and programming skills.

Achievements/Tasks
- Collaborated with event organizers and participants to ensure a smooth experience.

TECHNICAL SKILLS

`Verilog HDL` `System Verilog` `STA` `Python` `C` `HTML` `RTL Design` `AMD Vivado` `CSS` `JavaScript`

PROJECTS

AMBA - APB Protocol Design (02/2025 - 02/2025)
- Implemented the AMBA Advanced Peripheral Bus (APB) protocol in Verilog for peripheral communication.
- Developed master and slave modules supporting APB read/write transactions with proper handshaking and timing control.

Router 1x3 Design and Verification (11/2024 - 03/2025)
- Designed a 1-to-3 packet router in Verilog to route data based on control signals.
- Developed a comprehensive UVM testbench with drivers, monitors, scoreboard, and coverage for functional verification.
- Used System Verilog for transaction-level modeling and constrained random stimulus to achieve thorough test coverage.

Real-Time Vehicle Tracking and Fuel Monitoring System (07/2023 - 04/2024)
- Developed an IoT system for real-time vehicle tracking and fuel monitoring.
- Used GPS and fuel sensors for data acquisition; transmitted data to Firebase cloud.
- Created a Kodular app that retrieves and displays live vehicle location and fuel levels via Firebase.

Fuel Volume Detector (03/2023 - 06/2023)
- Created a system to measure fuel volume and send SMS alerts via GSM for remote monitoring.
- Calibrated sensor readings to provide accurate fuel level messages.
- Served as the foundational prototype for the extended vehicle tracking and monitoring system.

CERTIFICATES

Introduction to Design Verification using UVM
By IEEE CASS SBC TKMCE.

Fundamentals of Python Programming
by SpokenTutorial Project, IIT Bombay.

Accelerobotix Workshop on Arduino Programming
by NIT Calicut

SOFT SKILLS

`Team Work` `Problem Solving` `Time Management`