ARUN M

International Institute of Information Technology, Bangalore

📞 +91-9482496151 ✉ Arun.M004@iiitb.ac.in 🔗 linkedin.com/in/arun-m-903044281 ⌗ github.com/ArunM2402

Education

International Institute of Information Technology, Bangalore	**2024 – Present**
Master of Science by Research (VLSI)	*3.78/4 CGPA*
International Institute of Information Technology, Bangalore	**2024**
PG Diploma in Advanced VLSI	*3.85/4 CGPA*
Government SKSJ Technological Institute	**2020 – 2024**
Bachelor of Engineering in Electronics and Communication	*8.9/10 CGPA*

Internship Experience

Volvo Bus Corporation	**August 2023 – September 2023**
Product Development Intern	*Bangalore*

- Worked on developing innovative switching solutions to enhance Modern Volvo 9600 dashboard ergodynamics.
- Collaborated with multiple departments like Electrical, Mechanical, Interior Vehicular Design, After-market etc over the duration.

Projects

Design and Verification of APB Slave
- Designed a APB Slave Module in Verilog HDL. The design was tested for different cases using SystemVerilog.

Implementation of Machine Learning Models for Pre-CTS Identification of Timing Critical Flip-Flops
- Developed machine learning models for identifying timing-critical flip-flops in digital circuits before clock tree synthesis (CTS), improving the timing optimization process.
- Implemented RTL-GDSII flow on benchmark circuits using Cadence tools for dataset genertaion and efficient pre-processing.

Design of Single Pole Double Throw Switches for 28GHz 5G NR Application
- Developed the switch in 90nm CMOS technology. The switch was tested for parameters like insertion loss and isolation.

Sparkfun Brushless Motor Driver - 3-Phase (TMC6300)
- Designed a PCB for TMC6300 Motor driver IC.
- The schematic and layout was done using Altium PCB Designer.

Credit Card Fraud Detection System
- Devised a credit card fraud detection system using different machine learning algorithms.
- The project explored algorithms like logistic regression, decision tree and ANNs and compared the accuracy metrics among all models.
- It also delved into novel methods of data pre-processing to improve efficiency of the model.

Technical Skills

Languages: Python, C, Verilog
Tools: Yosys, Xilinx Vivado, LTSpice, Cadence Genus, OpenLane,Altium PCB Designer

Relevant Coursework

- System Design Through FPGA
- Digital CMOS VLSI Design
- Hardware Modelling Using Verilog
- Physical Design Using ASIC
- Machine learning

Certifications

- VSD-SoC Design of the PicoRV32 RISCV micro-processor, Udemy
- VSD- Static Timing Analysis, Udemy
- Machine Learning, Pantech ProLabs India Pvt Ltd
- Game development, Ubisoft in association with Techfest, Indian Institute of Technology Bombay
- Antenna design, testing and fabrication, Entuple Technologies Pvt Ltd

Achievements/Extra-curricular

- Selected as a fellow for VLSI Design Conference-2025.
- Core Member of various committees for hosting events at Government SKSJ Technological Institute.
- Finalist-Hack4Sustainability,Siemens and Smile Foundation
- Finalist-PitchPerfect,BMS College of Engineering,Bangalore
- Participated in Indian Film Project-Scriptwriting Challenge,2021
- Participated in various state level and national level dance competitions- Bharatanatyam.
- Published the poem- Tenebrosity in the book, Epiphany.