Kanishk K U

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Technical Skills

- Programming languages: **Proficient:** Python, Verilog, VHDL **Familiar:** C, SystemVerilog, TCL
- Platforms & Hardware: Arduino, NodeMCU, 8086, ARM Cortex, FPGA, Blynk IoT, IFTTT
- Technologies & Tools: KiCAD, Logisim, LTspice, Xilinx Vivado, Modelsim, Git, PyCharm, VS Code, Scilab
- Creatives & Others: Figma, Adobe XD, Illustrator, Photoshop, AfterEffects, Premiere Pro

Work Experience

FOSSEE Intern – IIT Bombay   Jan 2023 – Present
Remote

- Designed digital and mixed-signal circuits, including ICs and PCBs.
- Assisting in the design and development of electronic circuits using the eSim EDA tool.
- Utilized hardware description languages such as VHDL and Verilog to design and simulation of digital circuits.

VLSI Design Intern – Maven Silicon   Oct 2022 – Nov 2022
Bengaluru – KA, India

- Integrated, simulated, and synthesized an AHB2APB bridge design project using Verilog HDL.
- Development of VLSI design flows, including schematic capture, simulation, synthesis, and layout.
- Developed and modeled circuits using VLSI design tools such as ModelSim and Quartus Prime.

Electronics Engineering Intern – Tech Analogy   Jun 2021 – Oct 2021
Chennai – TN, India

- Designed and developed UAVs and electronics for small electric vehicles.
- Experienced in using MATLAB for stability and scalability analysis of UAVs.
- Skilled in C and Matlab programming, embedded systems design, and troubleshooting.

Hardware Engineer Trainee – Uniplus Computers   May 2020 – Oct 202
Coimbatore – TN, India

- Assembled, customized, and configured computer systems.
- Installed and configured software and driver and diagnosed and troubleshoot computer issues.
- Setted up required hardware and LAN/WAN network requirements and managed their components.

Projects

AHB-APB Bridge Controller   Nov 2022
Verilog, ModelSim, Quartus Prime

- An AHB-APB bridge was developed to connect the high-speed AHB and low-power APB. It serves as a communication link between the low bandwidth peripherals on the APB and the high bandwidth ARM processors on the AHB, allowing for seamless communication between the two.

Adaptive cruise controlled car   Jan 2022
ATmega2560, Arduino, Java

- Car using Arduino Mega, Ultrasonic sensors, IR sensors, and a Motor driver that uses ACC and Edge Detection technology to help the driver manage the vehicle's acceleration to maintain speed or avoid accidents.

Auto Home - Home automation   Jun 2021
ESP32, Arduino, Blynk, IFTTT

- An IoT-based home automation system was created to control appliances securely through a mobile app built using MIT App Builder. The app allows for real-time communication between multiple devices and a simple user interface for remote monitoring.

Live Weather Station   Mar 2021
ESP8266, Arduino, Firebase, Blynk

- An IoT-based weather station was designed using a NodeMCU, DHT11 sensor for measuring humidity and temperature, and an FC37 sensor for measuring rainfall. The data collected is uploaded to Firebase and can be viewed on a web dashboard.

Position of Responsibility

- **Head** of Media and Content in **IEEE SRM Student Branch**   *Jan 2021 - Present*
- **Creative Head** in **Placfv's - SRM Placement Cell**   *Jan 2023 - Present*
- **Committee Head** of Creatives committee in **Aaruush SRM**   *Aug 2021 - Present*
- **Member** of Tesla Lab in **Next Tech Lab**   *Oct 2020 - Present*

Education

SRM Institute of Science and Technology • Chennai – TN, India   Sep 2020 - Jun 2024
Bachelor of Technology - Electronics & Communication • GPA: 8.8/10.0