THUMMALA OBUL SAI

+91-7013899292 | obulsai187@gmail.com | Rayachoty, Andhra Pradesh
LinkedIn Profile | GitHub Profile

OBJECTIVE

A motivated and dedicated 3rd-year Electronics and Communication Engineering student at IIIT RGUKT RK Valley, actively seeking an internship to gain practical knowledge and enhance technical skills. Passionate about learning and exploring VLSI design, hardware development, and semiconductor technologies. Eager to work on real-time projects involving innovative advancements in chip design and fabrication. Committed to contributing effectively to an organization while gaining valuable industry experience in the VLSI domain.

EDUCATION

B.Tech, Electronics and Communication Engineering
IIIT RGUKT RK Valley — Oct 2022 – Jun 2026
Current CGPA: 8.26 / 10.0

Pre-University Course
IIIT RGUKT RK Valley — Nov 2020 – Sep 2022
CGPA: 9.53 / 10.0

SSC (10th Standard)
Sri Chaitanya School, Vijayawada — Jun 2019 – Mar 2020
CGPA: 10 / 10.0

SKILLS

Programming Languages: C, C++, Python, Verilog
Circuit Design: Familiar with both Analog and Digital circuits
Technical Skills: Digital Electronics and Analog Electronics
Embedded Systems: Experience with Arduino, Microprocessor (8086), Microcontroller (8051), Computer Architecture
Software Tools: MATLAB, Xilinx Vivado

ACADEMIC PROJECTS

Digital Voting Machine Using FSM and Sequential Logic

- **Description:** Designed an electronic voting system using Finite State Machines (FSM) to ensure secure vote casting and real-time tallying. The system enables multiple candidates, prevents duplicate voting, and provides a reliable tallying mechanism.
- **Technology:** Verilog, Sequential Circuits, FSM.
- **Components:** FPGA Board, Xilinx Software, Keypad Interface, Display Module.

Adaptive Time Management System Using FPGA: Digital Clock and Stopwatch Integration

- **Description:** Developed an FPGA-based digital timekeeping system featuring both a digital clock and a stopwatch. The system efficiently tracks and displays time while allowing seamless switching between clock and stopwatch modes, ensuring accurate time measurement.
- **Technology:** Verilog, Digital Logic Design.
- **Components:** FPGA Development Board, Xilinx Software, Seven-Segment Display.

Smart Lock with OTP Authentication

- **Description:** Developed a secure smart lock system with OTP-based authentication to enhance security and prevent unauthorized access. The system generates a unique OTP for each entry attempt, ensuring robust protection.
- **Technology:** Embedded Systems, Microcontrollers, Verilog.
- **Components:** 4x4 Keypad, I2C LCD Display, Arduino board, GSM Module (sim800A), Servo motor.

Single Port RAM Design and Implementation

- **Description:** Designed and implemented a single-port RAM module to store and retrieve data efficiently using FPGA. The project involved memory initialization, read/write operations, and optimizing storage access time.
- **Technology:** Verilog, FPGA Design, Memory Architecture.
- **Components:** FPGA Board, Xilinx Vivado.

CERTIFICATIONS

- **FPGA-Based VLSI Design Workshop** (Verify here)
- **MATLAB Certification – MathWorks** (Verify here)
- **Circuits and Electronics 3: Applications – MITx (edX)** (Verify here)
- **Agnirva Space Internship – Provided by ISRO** (Verify here)
- **IoTX: IoT Systems and Industrial Applications with Design Thinking** (Verify here)
- **Pictoscience Certification** (Verify here)
- **VLSI for Beginners – NIELIT Calicut (Certificate of Participation)** (Verify here)

ADDITIONAL INFORMATION

- **Languages Known:** English, Telugu, Hindi.
- **Hobbies:** Reading Light Novels, Photography.