ADITYA RAJ

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CAREER OBJECTIVE

Aspiring VLSI and Analog Design Engineer with a strong technical background in semiconductor technology, ASIC design, and RF circuits. Passionate about designing high-performance, power-efficient integrated circuits by leveraging expertise in analog/digital optimization and circuit innovation. Seeking an opportunity to contribute to cutting-edge semiconductor solutions and drive advancements in modern chip design.

EDUCATION

M. Tech. (VLSI & Microsystems), IIST, Kerala (2025):	71%
B.Tech. (Electrical Engineering), MITS, Gwalior (2022):	74%
Class XII, Model Kerala HSS, Gwalior (2018):	81%
Class X, Model Kerala HSS, Gwalior (2016):	74%

WORK EXPERIENCE

Project Engineer, Wipro India Limited   (July 2022 – July 2023)
- Gained diverse experience working on projects with **DBS Bank Singapore (Chennai), Philips (Bangalore),** and an **internal Weather Application (Greater Noida).**
- Adapted to varied environments, collaborated with diverse teams, and refined engineering skills to meet unique project demands.

PROJECTS & RESEARCH

- **Tunable Chebyshev-II and Reconfigurable LPF Designs for 5G/6G:** Development and implementation of advanced filter designs for next-generation wireless communication.
- **Low-Power Analog ASIC-Based Temperature Sensor:** Integrated overall components and conducted top-level circuit testing for a **temperature sensor**, optimizing power efficiency and accuracy.
- **Testing & Integration of Diagnostic Module for Satellite Payload:** Worked on Electric Propulsion Systems, focusing on Quartz Crystal Micro balancing, as part of an ISRO payload project, ensuring system diagnostics and performance validation.
- **High Linearity Common-Source LNA (5 GHz, IIP3: 18.62 dBm):** Designed and implemented a 5 GHz Common-Source Low Noise Amplifier (LNA) with 18.62 dBm Output IIP3, ensuring enhanced linearity and performance.
- **Capacitive MEMS Sensor for Vibration Detection:** Implementation of a MEMS-based capacitive sensor for real-time mechanical vibration monitoring, enhancing sensitivity and reliability on software basis Project.

TECHNICAL SKILLS

- Analog & Digital IC Design
- CMOS Circuit Design
- Semiconductor Device Modeling
- Mixed-Signal Circuit Design
- Cadence Virtuoso, HSPICE, LTspice
- PCB Designing and testing components
- MATLAB AND IT'S SIMULATION

CERTIFICATIONS & TRAINING

- **NPTEL:** IC Fabrication, VLSI Design (2021-2024)
- **ISRO Certification:** Satellite-Based Navigation system online training by IIRS.
- **JAVA FULL STACK DEVELOPMENT:** Industrial training by WIPRO under STACK ROUTE PVT. LTD.
- **GAIL**: Analyzed power system harmonics using a **Power Quality Analyzer** during B. Tech training at **GAIL, Vijaipur.**
- **INDUSTRAIL AUTOMATION IN PLC SCADA:** Training in industrial automation under RAMAN AUTOMATION PVT Ltd.

SOFT SKILLS AND INTERESTs

- Analytical & Problem-Solving
- Circuit Debugging & Optimization
- Research & Development Mindset
- Team Collaboration & Leadership
- Effective Communication
- Book reading, video editing, traveling, movies, and music.