

Career Objective

Electronics Engineer with a strong knowledge in RF, Microwave, antenna fundamentals and full-stack simulations. Proficiency in HFSS, MATLAB and communication systems. Designing and validating antennas for different applications with fabrication and testing. Aspiring engineer with a strong drive for IEEE engagement, technical competitions and research presentations.

Projects

RaNaT: Towards Cleaner and Brighter India

- Engineered a IoT-based solar tracking system, focused on sustainability and cost effectiveness with real-time monitoring.
- Achieved a 15% increase in energy storage efficiency while focusing on small-scale renewable applications.

High-Performance Sub-6 GHz Patch Antenna with Crescent DGS for 5G Applications

- HFSS designed microstrip patch antenna with DGS operating at 3.5GHz, resulting in a gain improvement from 7-32dB.
- Obtained results at -7dB without DGS and -32dB with DGS, achieved gain improvement from 3.7 and 4.06, respectively.

Design and Simulation of Phased array antenna with beam steering for Sub 6GHz Applications

- Designed a 4x4 phased array with beam steering for Sub 6GHz applications on FR4 at 3.5GHz compatible for 5G applications.
- Achieved S11 of -22.5dB and gain of 6.87dB and directivity of 22.6 with beam-steering

Education

- 2026 – **Bachelor of Engineering**, Sai Vidya Institute of Technology (CGPA: 8.9 - till 6th semester)
- 2022 - **Pre University** (PUC), Jnana Jyothi PU College (92.83%)
- 2020 - **SSLC**, Jnana Jyothi High School (94.4%)

Skills & Abilities

HFSS | MATLAB | MS Office | Python | LabVIEW | Embedded systems | Antenna | 5G |
Microwave | RF | Python | C | Validation | Fabrication | Antenna Design | Communication |
Leadership | Project Management

Workshops and Internships

SEMICON CONCLAVE 2025 | **Antenna Design and Simulation Aspects** (3days) (2025) | **Antenna Tool Boxes Workshop - MATLAB** (2025) | **Virtual Internship WAMS** (30 June – 25 July 2025).

Key Achievements and Roles

- **Winner: INVENTRONICS Hackathon** conducted by Dept. of ECE, SVIT | 2nd Place: **TECHNOVA 2024, TELEPOSIUM 3.0** Mini Project Competition | **3rd place: CHANAKYOTSAVA 2025** Paper Presentation in TECH VIDYA 2025, SVIT.
- Presenter: **MAPCON 2024, SRISHTI EVENT** and **IMTEX 2025**, demonstrating strong research and presentation skills.
- Secretary: IEEE SVIT SBC(STB11371), Chair: IEEE SVIT CEDA, CASS, SPS and EMBS SBCs.
- Collaboration – Volunteered a **3-day workshop on VLSI Physical Design Workshop, SVIT**, and 2day event, **INTERNATIONAL MICROWAVE WORLD LEADER'S CONCLAVE (IMWLC) 2025**, and **"IEEE FNWF 2025"**, Volunteered **IEEE DAY STUDENT BRANCH OFFICE BEARERS CONCLAVE** at SVIT and Student Presenter – "Spark Your Ideas" Outreach Program.
- Publication: **"High-Performance Sub-6 GHz Patch Antenna with Crescent DGS for 5G Applications"** is accepted for ICMNWC 2025 and for publication in IEEE Xplore Digital Library.

Certifications

- MATLAB onramp
- Microstrip Patch Antenna Array in Ansys HFSS
- MATLAB Wireless Communications Onramp
- Python Development and Python Programming Fundamentals