

AYUSH GUPTA

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EDUCATION

Course	College / University	Year	CGPA %
B.Tech (ICE)	Netaji Subhas University of Technology	2026	7.09
CBSE (Class XII)	New Multan Nagar Senior Secondary School	2021	85
CBSE (Class X)	New Saraswati Public School	2019	92.8

INTERNSHIP

• RF Antenna Design Intern | NSUT - Department of ECE | Delhi, India

June 2025 - Current

- Working on L5-band antenna design and optimization using CST Studio Suite, targeting resonance at 1.176 GHz.
- Designed and simulated antenna models including ground plane, substrate, feed line, microstrip patch, and port setup.
- Analyzed and optimized S-parameters, Z-parameters, bandwidth, and return loss, with focus on achieving broadband operation and improved radiation performance.

PROJECT

- Simulation of Temperature and Flow Control Systems
 - Simulated temperature and flow control processes using MATLAB/Simulink to analyze system dynamics and controller behavior.
 - Implemented and tuned P, PI, and PID controllers; utilized state-space modeling and pole placement techniques to assess stability and improve transient response.
- PID-Based Speed Control of a DC Motor
 - Developed and implemented a PID controller for real-time speed control of a DC motor using Matlab and Simulink hardware interfacing.
 - Tuned controller gains to minimize overshoot and steady-state error, ensuring stable performance under varying load conditions..

POSITIONS OF RESPONSIBILITY

• Project Group Leader | Academic Project

Sep 2024-Oct 2024

- Led a 4-member team in designing and developing a smart sensor-based control system as part of a core ICE academic project.
- Managed task distribution, supervised technical implementation, and ensured timely progress across all phases of development.
- Handled system integration, documentation, and presented the final working model during project evaluation.

ACADEMIC ACHIEVEMENTS

• Maintained an overall CGPA of 7.09/10, with consistent academic growth from 6.2 to 7.67 over six semesters, reflecting improved proficiency in core engineering subjects.

OTHER INFORMATION

Technical Skills & Tools: Proficient in C, Java, JavaScript, Python, MATLAB/Simulink, and SQL with handson experience in programming. Skilled in circuit design, control simulation, and real-time data acquisition
using embedded systems.