



GAURAV KUMAR

BTech. in Electronics and Communication Engineering
School of Studies in Engineering and Technology,
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Degree	University/Board	Institute	Year	CGPA / %
B.Tech. (ECE)	GGV, Bilaspur	School of Studies of Engineering and Technology, GGV Bilaspur	2026	8.85 (up to 7 th sem)
Intermediate (12 th)	CBSE	Sri Chaitanya Techno School, Visakhapatnam	2020	85%
Matriculation (10 th)	CBSE	BD Public School, Hajipur	2018	84%

EXPERIENCE

Fact App / Edtech Platform / June 2023 – July 2023

- Joined fact app as growth mentor and student mentor and at the end of internship, got the stipend of 50k.
- Counseled 120+ students on diverse college options, application procedures, and potential career paths, leveraging insights from EDUGLE experience to provide personalized guidance and support to students directly.

KEY PROJECTS

BER vs SNR Analysis for Wired & Wireless Channels / MATLAB, Simulink / 2025

- Modeled Bit Error Rate (BER) vs. Signal-to-Noise Ratio (SNR) for wired and wireless communication channels using MATLAB and Simulink.

Verilog Logic Gates Implementation / Verilog HDL / 2025

- Implemented synthesizable Verilog modules for **basic digital logic gates** (AND, OR, NOT, NAND, NOR, XOR, XNOR) with functional verification using testbench simulations, strengthening fundamentals of **RTL design and digital electronics**.

Dhun 1.1 – The Music Analyzer / Python, CNN, NumPy / Dec 2024

- Upgraded the system with CNN-based music transcription using CQT and STFT, trained on 19,000+ MIDI samples for accurate note extraction and real-time inference.

Dhun – The Music Analyzer / Python, Librosa, NumPy, Tkinter / Aug 2024

- Implemented MFCC, DTW, and FFT algorithms to extract 8 key musical features from audio compositions, which are used to classify music with up to 90% accuracy.

ACHIEVEMENTS

- Bagged a stipend of 50k in first year during Fact App internship.

TECHNICAL SKILLS, COURSES AND CERTIFICATIONS

- Languages:** HTML, CSS, Java script, ReactJs, Python, Verilog, HDL, MATLAB
- Tools, Framework, Software:** VS Code, Jupyter Notebook, Vivado, LtSpice, GitHub, MATLAB, Wordpress, Proteus, Canva, Adobe
- Certifications:** Introduction To Internet of Things ([NPTEL – IIT KGP](#)), Data Analytics ([SWAYAM – NITTTR](#)), Introduction to Intellectual Property ([SWAYAM – IIT KGP](#))
- Core Courses:** Network, Signal and System, Electronic Devices and Circuit, Digital Electronics, Analog Electronics, Communication, CMOS VLSI Design, Digital Signal Processing, Linear Integrated Circuits
- Trainings and Workshops:** RTL Design Workshop ([KT Semicon](#)), RTL Design and Verification ([The Silicon Sandbox](#)), VLSI for Beginners ([NIELIT Calicut](#)), MATLAB Onramp ([MathWorks](#))
- Soft Skills:** Content Writing, Designing, Leadership and Management, Problem Solving

EXTRACURRICULAR

- Associated with **National Service Scheme** (NSS), GGV Bilaspur, to promote sustainability. [2022-2025]
- Content Manager lead at **Equlibrio** presents Solasta- Techfest BTech GGV. [2023]
- Content Team Lead at The Flip Flops (ECE Department Official Newsletter) [2024]
- Student Coordinator at **The Flip Flops** (ECE Department Official Newsletter) [2024-25]
- Student Helping Platform EDUGLE (2020- 2024)