



## GAURAV KUMAR

BTech. in Electronics and Communication Engineering  
School of Studies in Engineering and Technology,  
Guru Ghasidas Vishwavidyalaya, Bilaspur  
NAAC A++ Accredited

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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 <sup>th</sup> sem)
Intermediate (12 <sup>th</sup> )	CBSE	Sri Chaitanya Techno School, Visakhapatnam	2020	85%
Matriculation (10 <sup>th</sup> )	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 **Equilibrio** 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)