

# **Amandeep Singh**

## **Electronics & Communication Engineering**

Chandigarh College of Engineering & Technology

E-mail: singhaman0967@gmail.com

LinkedIn: Aman

Phone: +91-9530688253

Education	Institute	Year	CPI/%
Bachelor Of Engineering:	Chandigarh College of Engineering and	2022-25	7.0
(B.E Electronics and Communication) Diploma:	Technology Chandigarh College of Engineering and	2019-22	77%
(Computer Science & Engineering) Matriculation:	Technology Saupin's School Sec 32, Chandigarh	2016-17	8.8

#### PROFESSIONAL SUMMARY

With a background in Computer Science and a B.E. in Electronics and Communication, developed experience in both hardware and software fields. Worked on Python-based data analysis, AI based automation solutions, and practical IoT projects. Additionally, skilled in research, data visualization, SEO and applied ML Concepts to support decision-making processes. Passionate about leveraging technical expertise and leadership skills to contribute to impactful projects.

#### **INTERNSHIPS & IT**

• **NIELIT & IIT Ropar,** 6 Months Industrial Training (AIML)

(Jan' 25- Jun'25)

- o Worked on *machine learning pipelines* using Python, with real-time data preprocessing and model evaluation.
- $\circ \ \ \text{Real-world use cases using OpenCV for } \textbf{image processing}, \ \text{NLP pipelines, and } \textbf{Agentic AI} \ \text{frameworks}.$

• Aeren IT Solutions Pvt. Ltd., Summer Intern

(Jun' 24)

- Developed a home security system using face recognition libraries to enhance security measures.
- Aeren IT Solutions Pvt. Ltd., Summer Intern

(Jun' 23)

Worked on developing home automation systems to improve efficiency and enhance user convenience.

#### **PROJECTS**

• SmartBite – AI Wellness Engine | Link

(Apr' 25-Jun' 25)

- $\circ \ \ Developed \ an \ OCR-NLP \ based \ system \ to \ extract \ food \ items \ from \ restaurant \ bills \ and \ analyze \ their \ nutritional \ values.$
- Mapped extracted items to a calorie database to generate insights like total calories, fats, proteins, and carbs.
- Delivered personalized health feedback with data visualizations using bar and pie charts.

• Fault Detection System for Electricity Meters, Kimbal Technologies | Link

(Jan'24-Jul'24)

- o Developed an OpenCV & AI based fault detection system for electricity meters on Raspberry Pi 5.
- Applied Python and its libraries like OpenCV for testing, image preprocessing, and model creation.
- o Optimized and tested the system to enhance fault detection accuracy and efficiency.

• Data Prediction and Analysis System | Link

(Feb25-Mar' 25)

- Developed a *predictive model* using Machine Learning to analyze and forecast data trends.
- Implemented data preprocessing, model training, and evaluation techniques for improved accuracy.

• **Gesture Control Car**, *IPD Expo (2nd Runner Up-Award)* 

(Jan'23-May'23)

- Created a gesture-controlled car with Arduino and gyroscope sensors, utilizing Bluetooth for communication.
- Designed and assembled hardware and programmed the Arduino for gesture recognition.

## POSITION OF RESPONSIBILITY

• Music Coordinator (Cultural Fest) | CCET Diploma Wing

(Feb'22- Mar'22)

- Oversaw sound setup, rehearsal schedules, and live performance execution.
- o Collaborated with technical teams to *troubleshoot* sound issues, ensuring smooth live performance execution.

### **TECHNICAL SKILLS**

- Programming & Development: Python, SQL, Flask, OpenCV, Image Processing
- Data Analysis & Visualisation: Pandas, NumPy, Matplotlib, Seaborn, Plotly, Microsoft Excel, MS Office
- AI & NLP Tools: Hugging Face, NLP Techniques, Transformers
- Research & Other Tools: Ahrefs, SEMrush, Google Analytics, Jira (Basic)

#### **EXTRA-CURRICULAR**

- Active Member of NSS
- Designed engaging and creative content for college events
- o Competed actively and won 5 times in Inter-School Cricket Tournaments