

# CHANDRIL MALLICK

✉ chandrilmallick1@gmail.com — 📞 +91-9733960909 — 📍 Kolkata, India  
🌐 linkedin.com/in/chandrilmallick — 🏠 github.com/chandrilmallick

## PROFESSIONAL SUMMARY

Full-stack developer and AI enthusiast with a strong foundation in building scalable ML pipelines and web applications. Proven experience in developing RAG-based chatbots, Computer Vision systems, and deploying models using FastAPI and Docker. Passionate about bridging the gap between research and production engineering in HealthTech and Automation domains.

## EDUCATION

### B.Tech in Computer Science & Engineering

2023 – 2027

Brainware University, Kolkata

- **Key Coursework:** Data Structures & Algorithms, Database Management, Artificial Intelligence, Operating Systems.

## TECHNICAL SKILLS

- **Languages:** Python, JavaScript (ES6+), Java, Dart, SQL, C++
- **AI/ML Frameworks:** PyTorch, TensorFlow, Scikit-learn, Hugging Face Transformers, OpenCV, LangChain, RAG
- **Backend Development:** FastAPI, Node.js, Express, RESTful APIs
- **Frontend Mobile:** React.js, Tailwind CSS, Flutter
- **DevOps Tools:** Docker, Git/GitHub, Linux (Bash), Firebase, Supabase, SQLite, MySQL

## EXPERIENCE

### AI Intern — Samsung Innovation Campus

2025

- Engineered NLP pipelines for text classification tasks, improving model accuracy by 15% through advanced pre-processing.
- Deployed machine learning models as scalable REST APIs using FastAPI, enabling real-time inference for client applications.
- Collaborated on dataset curation and annotation strategies, ensuring high-quality input for supervised learning models.

## KEY PROJECTS

### Dabba AI Ecosystem – Campus Automation Suite

🌐 Link

- Developed a **Retrieval-Augmented Generation (RAG)** chatbot using FAISS and OpenAI embeddings to answer syllabus-related queries with 90% relevance.
- Implemented an OCR pipeline (Tesseract/PaddleOCR) to digitize handwritten forms, reducing manual data entry time by 40%.
- Built a modular backend architecture using FastAPI to handle concurrent user requests efficiently.

### SmartHealth Loo – Non-Invasive Health Monitor

🏠 Code 🌐 Demo

- Designed a Computer Vision system using CNNs (ResNet architecture) to screen for early signs of UTI and kidney risks via urinalysis.
- Optimized model inference for edge devices, achieving sub-2-second latency on a Raspberry Pi 4.
- Integrated IoT sensors for real-time data logging to a secure cloud dashboard.

### Grammar & Spell Checker Chrome Extension

🌐 Link

- Developed a Chrome extension powered by NLP models to perform grammar correction and spell checking in real-time.
- Implemented a lightweight FastAPI backend for text processing and low-latency inference.
- Created a responsive browser popup UI for seamless user workflow.

### Emotion Aware Chat Application

🏠 Link

- Integrated a fine-tuned RoBERTa model to detect sentiment in real-time during chat sessions.
- Developed a reactive frontend that adapts UI themes dynamically based on emotional context.

## ACHIEVEMENTS & CERTIFICATIONS

- **Top 25 Finalist:** HP Dreams Unlocked (Tech Track) – Recognized for innovative approach in [Project Name].
- **Top 1000 Innovator:** National AI Competition – Selected from over 10,000 participants nationwide. .