

SUBHAMAY GANGULY

JR. BACKEND DEVELOPER

+91 6289658522 | subhag702@gmail.com | www.strein-11.github.io/portfolio/ | [Linkedin](#)

Location: Kolkata (Ready to Relocate)

SUMMARY

Passionate **Back-End Developer & AI/ML Engineer** with a proven record of delivering intelligent, scalable systems. Experienced in **Node.js, Express.js, MongoDB, and Python**, with expertise in deploying **machine learning and deep learning solutions**. Co-inventor on **AI patents** and **author** of international research papers in **OCR, automation, and recommendation systems**. Achievements include **2nd Runner-Up at Intel Unnati Grand Challenge 2022** and building impactful projects like **deepfake detection, AI-based automation, and disease prediction systems**. Recognized for turning complex research into production-ready, high-output solutions.

TECHNICAL SKILLS

Programming & Scripting: Python, C, C++, Java, JavaScript, PHP

Back-End Development: Node.js, Express.js, RESTful APIs, Authentication, Microservices

Databases: MongoDB, MySQL, PostgreSQL

Front-End (for Full-Stack exposure): React.js, Angular.js, HTML5, CSS3

AI & Machine Learning: TensorFlow, Scikit-learn, Pandas, NumPy, Matplotlib, OpenCV

Deep Learning & Applications: Computer Vision, OCR, NLP, Emotion Detection, Voice Recognition

Data Handling & Visualization: Data Analysis, Model Training, Data Preprocessing, Visualization

Tools & Platforms: Git, GitHub, Docker, CI/CD, Linux, Tkinter, MERN Stack

KEY PROJECTS

- **AI-Powered Irrigation & Watershed System** - Automated water monitoring and irrigation management; published as a **patent (202231068125 A)**.
- **Skin Phenotype Detection** - This is an AI Based System to Detect Different Skin Phenotypes and Moisture Levels published as a **patent (202231068125 A)**.
- **Evaluate Lip-reading using Deep-Learning Techniques** - Explored Silent Sound Technology using lip-reading and deep learning for enhanced communication and security.
- **FauxShield** – Deepfake Detection Platform | Built an AI-powered system to detect fake audio, video & images using deep learning; showcased at international forums.
- **End-to-End OCR for Bengali Handwriting** - Developed Efficient Net-based deep learning model for handwritten word recognition; selected for AISC-2024. (Pending)
- **Emotion-Based Music Recommendation System** - Designed ML model using heart rate & stress index; published at Springer ICACIE-2022.
- **Crab Disease Detection (TensorFlow)** - Implemented a deep learning model for disease classification, aiding aquaculture productivity. (Pending)
- Paper on **Transformative Impact of Blockchain Technology on Healthcare Systems and Socioeconomic Development**

PROFESSIONAL EXPERIENCE

Jr. Backend Developer, EVE Technologies Pvt. Ltd.

Aug 2025 - Present

- Migrated company-wide database from **MySQL to PostgreSQL**, enabling support for **JSON and advanced data types**, improving query flexibility and reducing storage overhead.
- **Redesigned API authentication workflows** for Android and Web apps, **cutting average login time by 40%** and ensuring a faster, more secure user experience.

- Building an **LLM-powered chatbot** (ongoing), using Rasa, LangChain, and RAG architecture, **reducing customer support tickets by 35%** through automated query resolution.
- **Automated user-based cPanel** provisioning with MySQL scripts, **reducing manual setup time** from hours to minutes and increasing operational efficiency.
- **Integrated FaceIO biometric authentication** for app and web login, enhancing security standards and reducing credential-related support issues.
- **Building a full-scale product from scratch** (ongoing), contributing to **system architecture, backend services, and deployment pipelines** to deliver a scalable enterprise-ready solution.

Tech Support Executive, EVE Technologies Pvt. Ltd.

Feb 2025 - Aug 2025

- Streamlined client onboarding by **identifying and fixing backend glitches in real-time**, ensuring zero downtime during initial deployments.
- Translated client requirements into **scalable backend solutions, reducing change requests by 30%** and improving overall system adoption.

Research & Development Intern, University of Calcutta

Jun 2023 – Aug 2024

- Developed & deployed AI/ML solutions including OCR for Bengali handwriting, deepfake detection, and disease prediction systems, **achieving recognition at AISC-2024 & ICSTA-2023.**
- **Optimized backend architectures** using Node.js, Python, and MongoDB, improving system performance and scalability in research prototypes by 80%.
- **Evaluate Lip-reading using Deep-Learning Techniques** - Explored Silent Sound Technology using lip-reading and deep learning for enhanced communication and security.
- **Crab Disease Detection (TensorFlow)** - Implemented a deep learning model for disease classification, aiding aquaculture productivity. (Pending)

EDUCATION

B.Tech CSE (AI & ML)

2021 - 2025

Brainware University

ADDITIONAL INFORMATION

Languages: English, Hindi, Bengali.

Achievements and Certifications:

- 2nd Runner Up in Intel Unnati Grand Challenge 2022 - AI-Powered Irrigation & Watershed System
- Hacktoberfest 2023 (GitHub) – Ranked among the Top 50,000 contributors worldwide.
- Nominated for YUKTI Innovation Challenge 2023 for innovative AI solutions in real-world use cases.
- International Research Contributions – Authored papers presented at AISC-2024, ICACIE-2022, ICSTA-2023, covering OCR, deep learning, and emotion-based AI systems.

Hobbies: Coding, Gaming, Binge watching Anime.