

# Shubhdeep Das

Software Engineer with a focus on Explainable AI Systems and Applied Machine Intelligence

+91 9425242060 | [shubhdeepdas0@gmail.com](mailto:shubhdeepdas0@gmail.com) | [linkedin.com/in/shubhdeep-das](https://linkedin.com/in/shubhdeep-das) | [github.com/Shubhdeepdsa](https://github.com/Shubhdeepdsa)

## TECHNICAL SKILLS

---

**Languages:** JavaScript (ES6), TypeScript, Python, Java, HTML5, CSS3

**Databases:** PostgreSQL, MySQL, MongoDB, Firebase, SQL Server

**Frameworks & Libraries:** React.js, Next.js, Nuxt.js, Node.js, FastAPI, Spring Boot, Tailwind CSS, Redux

**AI / Media Systems:** Whisper, Deepgram, FFmpeg

**Developer Tools & Cloud:** AWS (EC2, S3, EKS), Docker, Kubernetes, Git, GitHub Actions, Netlify, Heroku, Jira, Figma

## EXPERIENCE

---

### Tawgl

Sep. 2024 – Feb. 2026

*Full Stack Developer*

- Designed and built a **production-grade AI-driven hiring and evaluation platform**, covering resume-JD matching, automated interview question generation, candidate response evaluation, and recruiter-facing decision workflows. Focused on **deterministic scoring**, explainability, and traceable evaluation over black-box LLM outputs.
- Built a **real-time multilingual speech-to-text backend** (FastAPI, Whisper/Deepgram) supporting live interview transcription, diarization, translation, and hallucination filtering. Implemented minute-based audio windowing, silence detection, and failure-safe ingestion to ensure reliable operation under unstable network conditions.
- Engineered supporting infrastructure systems including a **low-cost offline transcription pipeline**, a **Google Meet recording bot**, and a **production-safe EC2 cleanup & audit framework**, improving system reliability, cost efficiency, and operational observability.

### IT Guy

May 2024 – Jul 2024

*Full Stack Developer*

- Delivered multiple production websites for external clients across **Nuxt.js, Shopify (Liquid), AMP, and Tailwind CSS**, including a content-driven platform with custom calculators (Bright Light Immigration), a high-performance AMP ad experience that reduced load times by **150%** and doubled engagement (Phillips Machine), and a responsive Shopify storefront with hot reload and automated deployment (People of Prints).

### Cardiotrack - Uber Diagnostics

Sep. 2023 – May 2024

*Software Developer*

- Led **Front-End Development** for Cardiotrack Care App V.10 and V.20, including end-to-end planning, design, development, and testing of endpoints to support backend operations and data digitization for pathology reports.

## PROJECTS

---

**Brainrot (In Progress)** | *Python, FFmpeg, PySceneDetect, Local LLMs*

**Local AI Video Intelligence**

- Exploring structured video understanding by decomposing long-form content into scenes, dialogue segments, and temporal constraints. Investigates how explicit structure and rule-based constraints can improve interpretability, reproducibility, and decision transparency in generative media systems.

**Resume-JD Intelligence Engine (Rizzume)** | *Python, NLP, LLMs*

**Hiring Intelligence**

- Investigated explainable candidate-job matching by modeling evaluation as a structured reasoning problem across skills, experience, tools, and role alignment. Emphasized deterministic scoring and decomposition of decisions, with language models used for validation rather than primary judgment.

**Doctor-Patient Symptom Graph System** | *Python, NLP, Vector Search*

**Healthcare AI (Prototype)**

- Studied symptom extraction and disease association from conversational medical data by combining NLP-based signal detection with graph representations. Focused on structured reasoning under uncertainty and the role of explainability in healthcare-oriented AI systems using controlled and synthetic datasets.

## EDUCATION

---

**Vellore Institute of Technology**

*B.Tech in Computer Science (Information Security)*

Vellore, India

May 2019 - May 2023