

Experience

AI Full-Stack Engineering Intern (QA Focus)

NeuraMach AI Studios

Jan 12, 2026 – April 12, 2026

- Resolved production **frontend defects** and delivered targeted **UI enhancements** to improve application stability and user experience.
- Engineered a secure **HLS video streaming pipeline** using **AWS S3** and **CloudFront** with **signed cookies**, **auth-based access control**, **anti-link sharing**, and **resume playback**.

Built Website for Abhinandan Mountreea

Freelance Frontend Developer

Jul 2025 – Nov 2025

- Engineered a high-performance real estate platform using **React.js**, **Vite**, and **GSAP**, improving load efficiency and interactivity.
- Integrated **Cloudinary CDN** with **WebP conversion** and caching, reducing initial load time by **50%**.
- Refined UX with parallax animations, responsive layouts, and **@vercel/analytics** for real-time performance insights.
- Applied **SEO best practices**, lazy loading, and micro-interactions, increasing engagement by **30%**.

Research Intern at MIT ADT University

In Campus

Jul 2024 – Dec 2024

- Developed **NeuraArm**, a **Brain-Computer Interface (BCI)** prototype controlling a robotic arm via **EEG signals**.
- Conducted **signal acquisition**, preprocessing, and feature extraction using **Python** and **NumPy**.
- Trained **ANN models** for left/right hand motor imagery classification.
- Enabled **real-time actuation** by linking neural outputs to robotic hardware using ML pipelines.

College Projects

InsightVault – AI-Powered Query Intelligence Platform

Nov 2025 – Present

- Architected InsightVault using **Next.js**, **Supabase**, and the **OpenAI API** for semantic search and LLM-driven responses.
- Implemented efficient data storage and real-time synchronization using **PostgreSQL**.
- Designed modular **API routes** with caching and latency optimization, improving backend performance by **30%**.

GeekdForGeeks Student Club Website

Jan 2025 – Jul 2025

- Live Project:** <https://www.gfgmitadt.in/>
- Built a centralized platform for showcasing college tech-club events.
- Engineered a Next.js-based website integrating 50+ academic topics, achieving **30% faster load times**.

Distributed File Storage System

Jul 2025

- Designed a scalable distributed storage architecture on **AWS** using **EC2** and **S3**.
- Built a fault-tolerant system ensuring high availability and low latency.
- Created a **RESTful API** for file upload, download, and sharing using **Node.js** and **Express.js**.

Additional Project:

- Neuro Signal Classifier:** Designed an EEG-signal classification pipeline using **Python**, **TensorFlow**, and **scikit-learn**.

Education

- MIT Art, Design and Technology University** — B.Tech in Computer Science (4th Year) Aug. 2022 – Jun. 2026

Technical Skills

Languages: JavaScript (ES6+), TypeScript, Python

Technologies: React.js, Next.js, TailwindCSS, GSAP, Node.js, Express.js, REST APIs, MongoDB, AWS (EC2, S3, CloudFront), Docker, GitHub Actions, Prompt Engineering, Git, Postman, VS Code

Achievements

- Second Runner-up at **SHODH 1.0 Campus Problem Hackathon (2025)** for an innovative full-stack solution.
- Published research paper on **BCI-based robotic limb control** in **IJIRT**.