MEDHA KUMAR

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SKILLS & INTERESTS

Technical: Languages: Python, C++, Java, JavaScript, Typescript, HTML, CSS.

ML: PyTorch, Tensorflow, Tesseract-OCR, NLP, LLMs, OpenCV, MediaPipe, FuzzyWuzzy, Hugging Face Transformers, BERT, GNN, NumPy, Pandas, Matplotlib, Gemini, Claude (Anthropic).

Databases: SQL, MongoDB, PostgreSQL, Supabase, PL/SQL.

Frameworks/Platforms: Git, Vercel, REST API, React.js, Next.js, Node.js, Tailwind CSS, Socket.IO.

Coursework: Data Structures and Algorithms, Object-Oriented Programming, SQL & Relational Databases, Machine Learning, Artificial Intelligence (AI), Operating Systems, Computer Networks.

INTERNSHIP EXPERIENCE

Sooru.AI   **Bangalore, Karnataka**
Machine Learning Intern   *May 2025 - Jul 2025*

- Used **LLaMA 3.1** to extract **room constraints from natural language prompts**, integrating results into **data pipeline** for large scale layout generation**.**
- Trained a **GATConv model** using **PyTorch Geometric** on 80K+ samples to generate **adjacency-aware floor plans**; benchmarked **DS2D** and **HDFpNet** for high-fidelity, **constraint-compliant** text-to-layout synthesis**.**
- Built a **3D floor plan viewer** with **React and Three.js** with **rendering pipeline optimization**, supporting touch input/elevation views, and a mini-map integration.
- Optimized **2D-to-3D transitions**, camera controls, and cross-device responsiveness, cutting interaction lag by ~30%**.**
- Worked in **Agile (Scrum)** environment using **JIRA** to coordinate with cross functional teams and deliver features.

Farm Connect, Life9 Systems Private Limited   **Bangalore, Karnataka**
Technical Intern   *May 2024 - Jul 2024*

- Optimized and documented **API issues in PHP** improving inventory accuracy and **reducing latency** by 2s/transaction.
- **Tested and debugged 3 mobile apps** (consumer, delivery, admin), resolving critical bugs that improved **efficiency by 45%**
- Designed **UI/UX for 3 apps** with wireframes and prototypes**, onboarding 200+ users** in one quarter.
- Collaborated with cross-functional teams enhancing platform workflows across frontend and backend.

PROJECT EXPERIENCE

Matcha-matchya| *github.com/Mxdhaa/matcha-matchya*   **Bangalore, Karnataka**
ML Engineer, Full-stack development   *Aug 2025 - Present*

- Designed and built a **resume–job description matcher** leveraging **OCR(Tesseract), NLP pipeline with spaCy, LLM APIs (Gemini) and fuzzy matching (FuzzyWuzzy)** to analyse skill gaps and improvement suggestions
- Implemented a backend pipeline for **resume parsing, skill extraction, and gap analysis**, with scoring and suggestions.
- Built the frontend using **React/Next.js** to provide an interactive interface for uploading resumes and viewing JD matches.
- Managed the project end-to-end: **research, model integration, full-stack development, and testing**.

Mobiphysio.in | *mobiphysio.vercel.app*   **Bangalore, Karnataka**
Volunteer, Full Stack Development   *May 2025 - Aug 2025*

- Rebuilt a **Next.js physiotherapy website,** aiming to boost **SEO traffic by 120%** and **reduce bounce rate by 40%.**
- Engineered a **secure booking system in Supabase**, with **Google Calendar sync, OTP verification and RBAC.**
- Revamped **UI/UX for 30+ services using TypeScript**, making content accessible and **increased user engagement**.
- Delivered a performance-optimized platform **focused on speed and scalability across the website**.

TECHNICAL EXTRA-CURRICULARS

- **Built a voice-controlled Arduino robot with embedded LLM for speech-based indoor navigation and obstacle avoidance.**
- **Finalist** at the **SIH ideathon 2024 and (top 30 out of 2000) at NariYukti Hackathon 2024** for building an **ASL Translator**.
- **Open source contributor** for Girl Script Summer of Code 2025.
- Active member of Nexus, NIT Surat Programming Club, **mentoring juniors in Data Structures and Algorithms.**
- **Competitive program ratings: CodeChef Rating: 1400, top 25% on Leetcode.**

EDUCATION

National Institute of Technology, Surat   **Surat, Gujarat**
Bachelors of Technology- Computer Science and Engineering   *Graduation Date: May 2027*