Pranav Uttarkar

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EDUCATION

Texas A&M University   College Station, TX
B.S in Computer Science, Minors in Business & Mathematics   *May 2027*
Craig And Galen Brown Engineering Honors   Computer Science GPA: 4.00

EXPERIENCE

AI Development Intern   May 2025 – Aug 2025
Daikin North America   *Houston, TX*
- Designed and built an enterprise-scale **AI Agent Platform** using **Python, MCP**, and **LangGraph,** automating repetitive workflows and **boosting efficiency for 10,000+ employees**.
- Developed **12+** custom AI tools integrating internal SOAP & REST **APIs** to automate HVAC configuration generation, system comparisons, and **RAG knowledge retrieval** based on natural language queries.
- Significantly **reduced LLM request latency** and **increased throughput** while preserving workflow fidelity.
- Collaborated with Product Managers and VPs to align platform capabilities with business needs, gathering feedback through live demos, iterating in **Agile**/Scrum methodologies to address key employee pain points.
- Deployed on **Azure cloud** services using DevOps and **Docker,** and integrated with the company's GenAI web platform (**TypeScript, React**, **Redux, CosmosDB)** for chat history and context management.

Machine Learning Researcher   Jan 2025 - Present
Texas A&M University   *College Station, TX*
- Engineered a **masked contrastive deep learning transformer model** for segment-level musical version matching, improving efficiency/robustness of song recognition with **Scikit-learn, TensorFlow & PyTorch**.
- Built a large-scale audio embedding processing pipeline in a **Linux** based **High Performance Computing** cluster that ran **150% faster**, enabling more efficient dataset experimentation.
- Achieved a **15% improvement in segment-level retrieval accuracy** over state-of-the-art CLEWS benchmarks with faster training times, with findings targeted for publication at **ICASSP 2026.**

Founder & Full-Stack Software Engineer   May 2025 – Sep 2025
MindWeb.systems
- Developed *MindWeb*, a gamified productivity web-app built with **React + TypeScript**, backed by **Supabase (PostgreSQL, Edge Functions, OAuth, Storage)** with features like friend streaks, **notifications,** and **caching.**
- Led early **beta launch and iterative marketing campaigns** across productivity communities, onboarding ~**100** early testing users, to find product-market fit, and enhance user experience through iterative feedback.

PROJECTS

Wildfire AI- 2025 Google Gemini AI Tidal Hackathon Winner | *AWS Bedrock, Python*   Oct 2025
- Built an AI-driven multi-agent system that detects potential wildfires from satellite data, enriches the incident with contextual insights like nearby evacuation zones, fire-stations, and generates real-time action plans.

Tamu-ProfSort | *Puppeteer, Javascript, Electron*   Jan 2025
- Developed a windows-app to track Tamu professor grading averages used actively by **400+ students.**

A&M Studys | *React, Next.js, TypeScript*   Sep 2024 – Dec 2024
- **Led a team of 7** students to develop a website to facilitate peer teaching and Q&A for Texas A&M courses.

Impossible Parkour   Dec 2023
- Developed a TikTok **game filter** amassing **35.5M** views and **70,000+ user generated videos** with logic based nodes

TECHNICAL SKILLS

Languages: C++, Python, Typescript/Javascript, Java, Haskell, R, PostgreSQL, NoSQL
Frameworks & Libraries: React, Fast-API, Pandas, NumPy, TensorFlow, PyTorch, Scikit Learn, LangChain/Graph,
Tools & Databases: Git, CI/CD, Docker, MCP, AWS Storage, Bedrock, Azure, CosmosDB, SupaBase, REST APIs, JSON
Interests!: Video Editing, Rock-Climbing, Geography, Long-Distance Running