Pranav Uttarkar

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EDUCATION

Texas A&M University | College Station, TX
Bachelor of Science in Computer Science, Math Minor, Business Minor
Expected Graduation: May 2027

- Craig And Galen Brown Engineering Honors — Computer Science GPA: 4.0

RELEVANT COURSEWORK: C++, Computer Organization, Data Structures & Algorithms, Machine Learning, Statistics,

WORK EXPERIENCES

AI Development Intern | Houston, TX **May 2025 – August 2025**
Daikin North America

- Designed and deployed an internal **AI Agent Platform** from scratch using **Python, MCP**, and LangChain/**LangGraph,** to automate workflows across Sales, Manufacturing & Marketing, which reduced repetitive tasks and improved efficiency for **10**,**000+ employees**.
- Developed **12+** tools for the agent & integrated internal company APIs to perform tasks like dynamically generating HVAC system configurations, comparisons, dealer locations, and **RAG knowledge retrieval** based on natural language inputs.
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- Collaborated with Product Managers, and VPs to ensure the platform **solved real employee workflow pain points**; gathered feedback through demos/discussions, iterated based on input.
- Used **Azure cloud** services and **Docker** to deploy and integrate with company LLMS and GenAI web platform with **TypeScript, React**, **Redux,** and **CosmosDB** for chat history and context management.

Machine Learning Researcher | College Station, TX **January 2025 - Present**
Texas A&M University | Sketch Recognition Lab

- Engineered a **masked contrastive deep learning transformer model** for segment-level musical version matching, enhancing recognition of different renditions of the same song with improved efficiency and robustness using **Scikit-learn, TensorFlow & PyTorch**.
- Curated and implemented a **150**% **faster** large-scale audio **embeddings dataset processing system**, currently the model achieves a **15% improvement in segment-level retrieval accuracy** over state-of-the-art CLEWS benchmarks and reduces training times. Targeting publication at **ICASSP 2026.**

Founder & Full-Stack Software Engineer **May 2025 – Present**
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, custom **notifications**, **large data tracking, caching** etc.
- Led early **beta launch and iterative marketing campaigns** across productivity communities to get ~**100** early testing users, to find product-market fit, and improve user experience.

PROJECTS

Tamu-ProfSort (bit.ly/tamuprofsort)

- Developed a desktop app **used actively by 400+ students** to track professor grading averages with **Javascript** & **Puppeteer**

A&M Studys **September 2024 – December 2024**

- **Led a team of 7** fellow students to develop a web app to facilitate peer teaching and Q&A for Texas A&M courses built with **Firebase** & **React**.

Impossible Parkour

- Developed a TikTok **game filter** which reached **35.5M** views and **70,000+ user generated videos** with logic based nodes

LANGUAGES, TOOLS, FRAMEWORKS

- **Languages & Frameworks**: Python, C++, R, Typescript/Javascript, Java, Haskell, React, PostgreSQL, NoSQL
- **Libraries, Tools & Databases:** Docker, Fast-API, MCP, LangChain/Graph, TensorFlow, Scikit Learn, pandas, numpy, Azure Cloud, CosmosDB, SupaBase, FireBase, node.js, REST APIs, JSON, Cloud Technologies, AI/ML Tools