

Tharan Bala

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TECHNICAL SKILLS

Languages: Python (Pandas, NumPy, Matplotlib), C, HTML5, CSS, Javascript, Typescript, SQL, MySQL, PostgreSQL,

Operating Systems: Linux, Unix, Windows

Frameworks/Tools: Python (Django, Flask), RESTful API, Django REST, Node.js, Next.js, React.js, Celery, Docker, Github, OpenAI, Groq

Cloud: Amazon Web Services, Vercel, Microsoft Azure

PROFESSIONAL EXPERIENCE

Software Engineering Fellow, Headstarter, Long Island City, NY

July 2024-September 2024

- Built and deployed 5 AI projects in 5 weeks using Node.js, Next.js, Firebase, Clerk, and Vercel, following agile methodologies with weekly sprints and combined CI/CD practices for iterative deployment
- Participated in weekly sessions with engineers from Google, Y Combinator, Stanford, Amazon and venture-backed startups

Full Stack Engineer Intern, Seminaut Inc, San Marcos, TX

June 2023-August 2023

- Utilized Flask framework, React.js and Typescript to develop scalable and reusable models for company's website
- Engaged with interns and maintained code synchronization through Git version control for consistent code quality
- Optimized back-end performance by leveraging RESTful APIs, resulting in 30% improvement

Full Stack Software Developer, Payoda Technologies Pvt Ltd, Coimbatore, India

May 2021-February 2022

- Created a Django and React.js based Cloth prediction dashboard to predict cloth stitch type, stitch pattern, securing a Proof of Concept (POC) project for company
- Executed containerization with Docker to streamline deployment processes and consistency across production environments
- Led project team as technical lead, mentoring two interns, for efficient task allocation and timely project delivery

Software Developer, Payoda Technologies Pvt Ltd, Coimbatore, India

February 2021-May 2021

- Coded an application deploying Flask, Angular.js, and NLP to assist Customer Care in handling customers with ease for Verizon, resulting in a Proof of Concept (POC) project for company following Agile methodologies
- Incorporated Google's Speech to Text API for voice transcription and implemented sentiment analysis using NLP methods on resulting text

Backend Developer, myTheo, Coimbatore, India

February 2020-February 2021

- Designed features for myTheo, a Real Estate Client with agencies across the USA and headquarters in California, incorporating Ruby on Rails, HAML, and SCSS increasing company's sales by 20%
- Collaborated with front-end developers to integrate RESTful APIs and ensure data flow between client and server
- Integrated Google Street View API to provide interactive 360 street level imagery of each real estate listing

Software Developer Intern, Alternative Soft, Coimbatore, India

August 2019-February 2020

- Developed portfolio construction software, processes for institutional investors, applying technologies such as .NET, Angular, micro services, and SQL, resulting in a 40% increase in clientele
- Involved in CI/CD practices to streamline software release process

PROJECTS

PitcherAI

Present

- Spearheaded the creation of PitcherAI, a tool that converts product reviews from the Internet into AI-generated marketing pitches, customized for social media platforms like YouTube, Instagram, and TikTok.
- Simulated diverse audience profiles using LLMs, enabling real-time assessment of the effectiveness of marketing pitches across various age groups and professions.

FlashMindAI

August 2024-September 2024

- Teamed up with 3 Fellows to build and deploy a SaaS product generating dynamic flashcards based on any topic using the Llama 3.1 LLM via the Groq API, integrated a paywall and custom pricing plans using the Stripe API

RateMyProfessor Scraper

August 2024-September 2024

- Implemented a web scraper to automatically extract data from RateMyProfessor and upsert to a Pinecone index, integrated with a RAG pipeline using LangChain and OpenAI GPT-4o to get up-to-date and relevant answers to user queries

Help Desk Chatbot, University of Wisconsin, Milwaukee

February 2024-May 2024

- Engineered and built the Help Desk chatbot, serving as primary contact method for the UWM IT Help Desk utilizing Django, RAG, Langchain, React.js, Kafka, Material UI, MySQL and AWS
- Used RAG to feed Universities KB's to LLM to Pinecone's vector database.

Portfolio

December 2023-January 2024

- Architected Personal Portfolio website showcasing projects, skill set and experience using React.js and Tailwind CSS.
- Leveraged GitHub pages for hosting, fostering it's built in CI/CD pipeline for automated deployment

EDUCATION

University of Wisconsin-Milwaukee

August 2022-May 2024

Master of Science in Computer Science

Sri Ramakrishna Engineering College

August 2016-May 2020

Bachelor of Engineering in Computer Science