Tushar Ranjan

tr822@drexel.edu| LinkedIn| Portfolio

EDUCATION

Master of Science, Computer Science, Drexel University, Philadelphia

Sep 2023- June 2025

Artificial Intelligence, Computer Vision, Data Structures and Algorithms, Developing user Interface,

Computer Networks, Software Project Management

GPA: 3.85/4.0

Bachelor of Engineering, Information Science, DSCE, Bangalore, India

Aug 2019 – June 2023

CGPA: 8.67/10

SKILLS

Programming Languages: Python, Html, CSS, Javascript, Java

Libraries/Frameworks: React.js,Django,Numpy,Pandas,Flask,Node.js,Langchain,Llama3,Cohere,Qdrant

Tools / Platforms: Git and Github, MATLAB, Figma, Linux, AWS, Oracle Cloud Infrastructure, tmux, nginx, Supabase

Databases: MySQL ,MongoDB,PostgreSQL

Technologies: Large Language Models(LLM), Retrieval-Augmented Generation(RAG)

WORK EXPERIENCE

Business Web Solutions | Web Development Intern

March 2023 - May 2023

- **Enhanced User Engagement**: Boosted user engagement by 30% across 5+ projects using advanced front-end technologies.
- **Server-Side Efficiency**: Increased server-side efficiency by 25% by optimizing back-end code and improving resource management, reducing load times and enhancing user experience.
- Component Development: Led the development of over 10 React JS components, boosting site traffic by 20%.
- **Process Improvement**: Streamlined Git/GitHub processes for three development teams, reducing merge conflicts by 40% and enhancing code integration efficiency.

M-Kube | Front-End Web Development Intern | Sydney, Australia (Remote)

March 2022 - June 2022

- **Front-End Revamp**: Led the redesign of the website's front-end, increasing user engagement by 35% through improved responsive design and feature integration.
- **Project Delivery Efficiency**: Achieved a 40% increase in project delivery efficiency by driving key insights and feedback in project meetings, ensuring compatibility across devices and seamless back-end integration.

PROJECT

AgentPals: Transforming Real Estate with Al-Driven Insights. Link

- Conceptualized and developed AgentPals, an innovative AI-powered platform that revolutionizes real estate
 transactions by automating and analyzing disclosure forms, drastically reducing manual errors and saving time for
 agents.
- Engineered the entire backend infrastructure from the ground up using **FastAPI**, **Cohere**, **Qdrant**, **Supabase**, and **LangChain**, and designed a responsive frontend with **React**.
- AWS-deployed application using NGINX for server management and tmux for session stability.
- Introduced a state-of-the-art Retrieval-Augmented Generation (RAG) chat feature, allowing users to interact
 intuitively with all documents related to a property, enabling smarter decision-making and enhanced client
 communication.
- **Empowered real estate agents** with advanced AI tools to manage property disclosures effortlessly, increasing their operational efficiency and ensuring compliance with regulations.

CERTIFICATION

- Oracle Cloud Infrastructure 2024 Generative AI Certified Professional.Link
- Java Programming Masterclass updated to Java 17 on Udemy. <u>Link</u>