SANJANA RAVI PRAKASH

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EDUCATION

Master of Science in Computer Science **Aug 2024 – May 2026**
University of Texas at Arlington, *Arlington, TX, US* *GPA: 3.9/4*
Bachelor of Engineering in Computer Science **Aug 2019 – May 2023**
Visvesvaraya Technological University, *India* *GPA: 9.22/10*

SKILLS

Languages: Python, Java, C++, HTML, CSS, JavaScript, PHP, Dart, .NET, SQL
Applications: MS Visual Studio, Android Studio, Figma, SQL Server, MySQL, SSMS, Firebase, Tableau, Azure, Flutter
Other Tools & Frameworks: OpenCV, Flask, NLP, LangChain, LLM, Streamlit, GANs, PyTorch, Artificial Intelligence, Machine Learning, Deep Learning, MLOps

CERTIFICATIONS

Neural Networks and Deep Learning (DeepLearning.AI)
Machine Learning in Production (DeepLearning.AI)

EXPERIENCE

University of Texas at Arlington, *Arlington, US* **Jul 2025 - Aug 2025**
Graduate Research Assistant (Machine Learning)

- Improved an image super-resolution system by replacing a text-based component with an image classifier, allowing the model to better enhance low-quality animal images.
- Built and tested the full PyTorch pipeline and ran experiments on multiple CIFAR-10 animal categories to validate the results.

Accenture, *Bangalore, India* **Aug 2023 - Aug 2024**
Software Engineer

- Contributed to the end-to-end development and deployment of scalable .NET Core services for a large-scale client-server architecture, ensuring reliable production rollouts and minimal downtime. Developed components using C#, ASP.NET Core, Angular, and SQL Server while integrating with Azure services and tools such as Azure DevOps and SSMS.
- Actively participated in CAB (Change Advisory Board) meetings to communicate and execute configuration changes, reducing project deployment delays by 25%.

Geekbytes Solutions, *Bangalore, India* **Jun 2023 - Jul 2023**
Web Developer Intern

- Developed and launched a responsive multi-page website using HTML, CSS, and JavaScript, improving the company's online presence and user engagement, resulting in a 43% increase in website traffic and conversions.
- Designed seamless user interfaces in Figma, enhancing the visual appeal and usability of the website, which led to a 30% increase in user satisfaction ratings.

Veripure Industry, *Bangalore, India* **Aug 2022- Dec 2022**
Machine Learning intern

- Built an ML system with Python and OpenCV to detect and classify chemical solution colors from images, deployed on web and Android platforms, cutting manual testing time by 40%.

PERSONAL PROJECTS

AI Future Self Simulator

- Created an AI tool that helps users think through major decisions by showing how different choices could play out over time, using an LLM (GPT-based) deployed via Azure OpenAI Service to reason through scenarios and clearly explain pros, cons, and trade-offs.

EdgeConnect+: Adversarial Inpainting with Edge and Color Guidance

- Designed a 3-stage GAN-based inpainting framework in PyTorch with edge prediction, TELEA-based color fusion, and final image synthesis. Implemented Canny edge preprocessing, mixed-precision training, EMA stabilization, VGG-based perceptual and style losses, and modular dataloaders for CelebA dataset to enhance structural and colour fidelity in image restoration.

AI-Powered Personal Finance Manager

- Built a Python based web app with Plaid integration and LLM-driven financial advice using (GPT-4 / GPT-3.5-Turbo) OpenAI API, enabling automated expense tracking, predictive budgeting, and personalized insights. Utilized Streamlit for UI, added bill reminders, receipt scanning, and recurring transaction detection to enhance user experience.

UML Scenario Architect

- Generative AI system leveraging LangChain, Groq's Llama 3.1, and Graphviz to autonomously transform software requirements into precise UML class diagrams through prompt engineering and multi-model orchestration.

Interview Bot

- Combined NLP (Natural Language Processing) and facial analysis using HuggingFace to build an interactive tool for simulating and improving interview performance using Python & Flask. The bot generates dynamic, context-aware follow-up questions, mimicking the flow of a human-led interview. Utilized HTML, CSS, Javascript for front-end and SQL for storing data. Undergrad Final Year Project- sanctioned under 46th series of Karnataka State Council for Science and Technology Student Project Program 2023.