

# Sampada Santosh Pavate

Arlington, TX

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## EDUCATION

- **Master of Science in Computer Science** Aug 2023 - May 2025  
*University of Texas at Arlington, TX*
- **Bachelor of Engineering in Computer Science** Aug 2019 - July 2023  
*Visvesvaraya Technological University, India*

## SKILLS

- **Programming Languages:** Python, Java, C++, R, Ruby, HTML, CSS
- **Machine Learning:** TensorFlow, Keras, PyTorch, Scikit-learn, OpenCV, NLP
- **Frontend and Backend:** React, Next.js, Node.js, Flask, Streamlit
- **Databases:** SQL Server, MySQL

## EXPERIENCE

- **Research Assistant** May 2025 - Present  
*University of Texas at Arlington*
  - Migrated the site from Jekyll to Next.js 14 (TypeScript, Tailwind CSS), built a responsive UI and converted YAML content to typed JSON.
  - Implemented Team/News/Publications as structured, filterable sections with dynamic lists.
  - Set up GitHub to Vercel CI/CD, enforced ESLint and enabled Vercel Analytics.
- **Full Stack Developer** Jan 2024 - June 2024  
*Gangavathiexports, Remote*
  - Automated Magento Open Source installation on Ubuntu using Ansible and configured SMTP for custom domain emails, reducing deployment time by 75%.
  - Integrated a mobile-friendly theme, updated user content, and helped customers create configurable product listings improving inventory management efficiency by 40%.
  - Integrated a secure payment gateway and SEO best practices to improve search engine visibility and drive organic traffic.
- **Software Developer Intern** Sep 2021 - Aug 2022  
*Maruti Constructions, India*
  - Developed and deployed a machine learning system using Linear Regression algorithms to analyze historical real estate data, achieving 92% prediction accuracy and reducing estimation time by 75%.
  - Engineered robust data preprocessing pipelines with outlier detection and feature engineering, improving model performance by 38%.
  - Architected a scalable Flask RESTful API with efficient endpoints and caching mechanisms for real-time price predictions during peak traffic periods.

## ACADEMIC PROJECTS

- **Learnify | Next.js, Clerk, Avian, Prisma, Stripe, Cypress, Vercel**
  - Built a comprehensive learning management platform by implementing content delivery, progress tracking, and e-commerce capabilities, serving the diverse educational needs of the users.
  - Developed responsive and intuitive user interface by leveraging TailwindCSS and Shadcn component library, increasing user engagement by 30% and improving session duration by 25%.
- **Maverick Market - Android E-Commerce Application | React Native, Firebase**
  - Engineered a real-time Android e-commerce app with wishlist management, dynamic pricing, & image optimization.
  - Improved app responsiveness by 50% through optimized database queries.
- **Deep Learning Based COVID-19 Detection | TensorFlow, Keras, NumPy, Pandas**
  - Architected a CNN model for medical image analysis by applying transfer learning and custom layer configurations, achieving 94% accuracy in COVID-19 detection from X-ray images, outperforming traditional methods by 15%.
  - Enhanced model training through advanced data preprocessing by implementing image normalization and augmentation techniques, increasing the training dataset by 300% while improving generalization by 10%.