

AMRUTH PAI THUKARAM

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Education

University of Texas at Dallas

Aug 2024 - May 2026

Master of Science in Business Analytics & AI

Dallas, Texas

Coursework: Advance Statistics, Applied ML, Prescriptive Analytics, Predictive Analytics for DS

Nitte Meenakshi Institute of Technology

Aug 2015 - Aug 2019

Bachelor of Science in Computer Science and Engineering

Bangalore, India

Coursework: Statistics, Python Programming, Machine Learning, Software Engineering

Technical Skills

Languages: Python, R, SQL (MYSQL, DB2), NoSQL (MongoDB), JAVA

Analytics: Data Wrangling, Statistical Modelling & Quantitative Analysis, Business Insight, Process Modeling

Data Science & MLOps: Pytorch, Tensorflow, Keras, Scikit-learn, Streamlit, MLFlow, Tableau, Gephi, CICD, AWS EC2, Docker

Tools & Competencies: Office 365, Excel, Jira, Agile, VS Code, PyCharm, Github Actions, DVC

Certifications: IBM Professional Data Science, DeepLearning.AI TensorFlow Developer

Work-Experience

Infosys

Aug 2019 - Mar 2024

Associate Consultant

Bangalore, India

- **Increased operational efficiency by 15%** through diagnosing & resolving client system issues, while developing customized application programs to meet unique client requirements
- Collaborated with cross-functional teams to ensure **consistent system integration and timely project delivery**
- **Optimized and refactored code, resulting in 10%** improvement in system performance
- **Automated client reports** by utilizing DB2 SQL, significantly enhancing reporting accuracy and reducing manual efforts
- **Mentored junior developers**, fostering skill development and contributing to the team's overall growth and productivity
- Designed and maintained application programs for IBM I systems using RPGLE and CLLE, ensuring high reliability
- **Led the development of a comprehensive full stack application** for Nike retailers, seamlessly integrating front-end (Angular) and back-end (Java, Spring Boot, MySQL) components

Biztime IT Solutions

May 2018 - July 2018

Software Engineer Intern

Bangalore, India

- **Led a team of 6 in developing ZonalDesk**, a mobile app providing reliable everyday services to rural areas
- Integrated Google Maps API to design an intuitive and efficient map interface, **enhancing app usability & service**
- Developed the app using Android Studio, **delivering a user-friendly solution** tailored to **rural accessibility challenges**

Projects & Leadership

Llama-Law (Legal Assistance ChatBot) | Python, Streamlit, Together AI API's, LlamaIndex, ChromaDB, Crawl4AI

- Developed a legal assistance chatbot as a part of Llama Impact Hackathon, capable of navigating complex government websites, simplifying bureaucratic language, and offering multilingual support for improved accessibility
- Enhanced relevancy of responses by utilizing Crawl4AI for targeted web crawling of legal and procedural content
- Fine-tuned a LLM model using legal datasets on Hugging Face to deliver accurate, empathetic, and context-aware responses for legal queries. Deployed the model on Hugging Face, enabling community access and testing

Satellite Imagery | Python, CNN, U-Net, OpenCV, Hugging Face, Weights and biases

- Developed and deployed a satellite image segmentation model on Hugging Face, enabling segmentation of images
- Integrated U-Net architecture for deep learning-based image segmentation
- Utilized Weights & Biases for real-time model diagnostics and performance optimization

TumorFlow | Python, CNN, VGG16, MLflow, Github Actions, CICD, AWS EC2, DVC, DagsHub

- Developed and deployed an end-to-end ML pipeline for kidney tumor detection from CT scan images using transfer learning with a pretrained VGG16 model and custom classifier layers
- Integrated MLOps tools like DVC for data versioning, MLflow for tracking experiments, and Docker for containerized deployment on AWS EC2 via CI/CD pipelines in GitHub Actions
- Enhanced scalability and reproducibility through modular project structure, YAML-configured workflows, and cloud deployment.