

RAMYA DHANDAPANI

Los Angeles,California | ramyadvanitha@gmail.com | linkedin.com/in/ramyadhandapani

EDUCATION

University of Southern California	Los Angeles, California
Master of Science, Computer Science	August 2025-June 2027
Analysis of Algorithms, Agentic Information Retrieval and Web Search Engines	
Bannari Amman Institute of Technology	Tamil Nadu, India
Bachelor of Technology, Information Technology, GPA: 3.62/4	August 2018-June 2022
(Python Teaching Assistant, IET Student coordinator, Member of Hackathon Lab)	

SKILLS

Technical Skills: Data Structures, Algorithms, Python, AngularJS, Java Script, HTML, CSS, Dash (Plotly), C, PostgreSQL, LLMs, RAGs, TensorFlow, PyTorch, Agentic AI, System Design, Web development; **Other Skills:** Problem Solving, Git, Ownership, Product Delivery, Agile Methodology, Team Management, Mentorship, Requirement Analysis

WORK EXPERIENCE

Soliton Technologies Pvt Ltd.,	Bangalore, India
Senior Project Engineer	May 2024-June 2025
<ul style="list-style-type: none">Led customer and user group meetings, delivering demos and gathering feedback to align solutions with client needsMentored junior engineers, fostering technical growth and collaborationStandardized Git branching practices and PR labeling policies, improving team collaboration and code review efficiencyEngineered custom solutions to overcome Dash and Plotly limitations, enhancing user experienceUndertook organization-level initiatives, including audit readiness, DevOps challenges (Top 5 finish), and knowledge-sharing events	
Project Engineer	June 2022-May 2024
<ul style="list-style-type: none">Developed interactive GUIs for Pre-Silicon validation (Package Mechanical Analysis Workflow Automation) process using Dash (Python Framework), HTML, and CSS, translating complex user requirements into user-friendly interfacesProposed and implemented a callback-based optimization despite initial team skepticism, reducing project loading time from 8 minutes to 1 minuteCreated scalable approaches to dynamically generate UI components, enabling reusability across new featuresDesigned lightweight, innovative UI solutions (e.g., image swap, mirrored layouts), saving multiple days of developer effort	
Project Engineer - Intern	July 2021-June 2022
<ul style="list-style-type: none">Developed dashboards and tools for hardware validation processes using Python, gaining real-world experience in software developmentDesigned and delivered new save-and-retrieve logic for complex data workflows with minimal guidance, later reused in other featuresRecognized with the Star Soliton Award for exceptional performance in taking on a managerial role during lead's absenceNominated for Rookie of the Year for strong frontend contributions and customer appreciation	

ACADEMIC PROJECTS

Conversational Data Visualization Tool	October 2025-Present
<ul style="list-style-type: none">A tool that lets anyone explore and visualize datasets using natural language - no coding or SQL required.The backend (API-based) handles query generation, SQL execution, and CSV/DB data retrieval, while the frontend-built with React and Tailwind-renders visualizations, manages dashboards, and maintains chat-based interaction.	
Semantic Segmentation Using Hybrid Deep Neural Network	February 2022-April 2022
<ul style="list-style-type: none">Implemented Deep CNN to achieve accurate building segmentation from aerial imagesOptimized model to remain lightweight by minimizing parameter complexity	

RESEARCH PUBLICATIONS

<ul style="list-style-type: none">Rotated Object Recognition Using Moment Features by Artificial Neural Network	
Published in <i>IJEST</i> , October 2019 [ISSN: 0973-6255 Volume 13 Number 2]	