Contact

nasaaimer2014@gmail.com

www.linkedin.com/in/jothi-mani-thondiraj-b2a674104 (LinkedIn)
github.com/joethi (Other)

Top Skills

Amazon Web Services (AWS)
Microsoft Excel
Data Analytics

Languages

Hindi (Professional Working)
Tamil (Native or Bilingual)
English (Full Professional)

Certifications

SuperDataScience Course completion: Statistics for Business Analytics and Data Science

Ask Questions to Make Data-Driven Decisions

Foundations: Data, Data, Everywhere

Enterprise Design Thinking Practitioner

Tableau A-Z: Hands-On Tableau Training for Data Science

Publications

Diffused interface Crystal Plasticity Finite Element Method: Biased mesh generation and accuracy

Jothi Mani Thondiraj

AI/ML Engineer and Microsoft-certified Data scientist building end-to-end ML pipelines and scalable systems.
Irvine, California, United States

Summary

Driven by dedication and a commitment to lifelong learning, I have transitioned my career to focus on data science, machine learning, and AI engineering. With several years of experience in mechanical and aerospace engineering, I bring a robust technical background and a proven ability to solve complex problems across disciplines. I specialize in machine/deep learning, AI Agents, RAG, data modeling, and uncertainty quantification, using tools like PyTorch, Scikit-Learn, Hugging Face, PostgreSQL, Langchain, and Azure ML.

As an AI Engineer at Nureal.ai, I led the development of a voice-enabled wayfinding application with RAG systems and AI Agents. As a Graduate Research Assistant at CU Boulder, I designed and optimized end-to-end deep learning models for NASA simulations, saving $150K in compute costs and ensuring 100% on-time delivery. My journey from PhD to master's was driven by a passion for building real-world machine learning products.

With over 4 years of hands-on experience, I've mastered selecting the right machine learning techniques for each problem, improving model accuracy, and deploying solutions in production. Explore my portfolio: https://www.datascienceportfol.io/nasaaimer2014.

I'm currently seeking new roles in the U.S. (no Visa sponsorship needed) and can start right away. Connect with me to collaborate on cutting-edge AI and data science projects.

Experience

nureal.ai
AI Engineer
March 2025 - August 2025 (6 months)
Colorado, United States

Built wayfinding-type mobile app prototypes with AR navigation, RAG systems, and LLM-powered agents.

University of Colorado Boulder
Graduate Research Assistant
August 2021 - December 2024 (3 years 5 months)
United States

- Drove an end-to-end ML development lifecycle initiatives, maintaining a 100% quarterly delivery rate on 3 mission-critical NASA projects.
- Built deep learning models for NASA simulations, cutting $150K in compute costs and improving efficiency.
- Designed DNNs, CNNs, for predictive modeling, ensuring reliability through engineering rigor.
- Automated CFD data pipelines with Python and Bash, speeding up data processing and reducing manual effort.
- Used GitHub for version control, supporting reproducible research and team collaboration.

Indian Institute of Technology, Kanpur
Project Engineer
January 2021 - June 2021 (6 months)
Kanpur, Uttar Pradesh, India

- Delivered end-to-end ML pipeline for insurance billing, cutting claim errors by 18% in just 6 months.
- Applied ML (KNN, Logistic Regression, Random Forest, etc) to insurance billing/fraud detection, boosting accuracy by 12%.
- Trained classification and regression models on Amazon SageMaker and optimized hyperparameters in AWS.
- Conducted EDA with SQL and Tableau, uncovering insights that improved marketing strategies.
- Designed MLOps pipelines to streamline deployment and enhance team workflows.

Education

University of Colorado Boulder
Master of Science - MS, Mechanical Engineering · (2021)

Indian Institute of Technology, Kanpur

Master of Technology - MTech, Aerospace, Aeronautical and Astronautical Engineering · (2018 - 2020)

Madras Institute of Technology

Bachelor of Engineering - BE, Aeronautical engineering · (2014 - 2018)