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(LinkedIn)
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(Personal)

Top Skills

Operations Research

Parsing

Healthcare Information Technology
(HIT)

Languages

English (Full Professional)

Hindi (Professional Working)

Tamil (Limited Working)

Malayalam (Native or Bilingual)

Telugu (Native or Bilingual)

Amaljith Kuttamath

AI Engineer | Faculty @GMU | NLP researcher in Healthcare
Arlington, Virginia, United States

Summary

AI Engineer with robust experience in AI research and development,
specializing in natural language processing (NLP), machine learning
(ML), and knowledge graphs. At Sorcero, I lead retrieval-augmented
generation (RAG) applications on Google Cloud's Vertex AI, with
a deep focus on medical records and oncology data. I excel in
transforming complex data into actionable insights via advanced
visualization and automation.

My previous roles as a Technical Consultant and Solutions Architect
have allowed me to deliver scalable AI/ML solutions in industries
like finance, and manufacturing. I possess a strong engineering
foundation with a proven track record of developing and deploying
solutions that achieve over 90% accuracy in predictive maintenance,
anomaly detection, and time-series forecasting.

Experience

Sorcero
10 months

AI Engineer
May 2024 - Present (6 months)
Washington DC-Baltimore Area

• RAG Application Development: Spearheaded the design and deployment
of a Retrieval-Augmented Generation (RAG) application on Google Cloud's
Vertex AI, Gemini Pro, enhancing query capabilities for medical records and
oncology/PubMed data.
• Knowledge Graph Development: Designed and implemented a knowledge
graph for organizing and connecting diverse medical
datasets, improving data accessibility and insights. [Multi-modal indexing and
embeddings]
• Sentiment Analysis: Conducted sentiment analysis on medical expert records
to determine product safety for various diseases.

• Database Management: Integrated and optimized an Elastic Search and neo4j for advanced data querying, supporting real-timeanalytics.
• Chain of Thought Processing: Utilized Langchain and LlamaIndex for chain of thought processing and automated calls between LLM and execution chain.

Senior NLP Research Fellow
January 2024 - May 2024 (5 months)
Washington DC-Baltimore Area

Terrorism, Transnational Crime, and Corruption Center (TraCCC)
Data Analyst
September 2023 - May 2024 (9 months)
United States

INECTA - Microsoft Dynamics 365 Gold Certified Partner
Technical Consultant
May 2021 - August 2022 (1 year 4 months)
United States

-RAG System which generate visual insights from natural language queries leveraging GPT-3.5turbo.
- Analyzed data from 5K+ inventory items and sales records for accurate forecasting.
-Developed 20+ server reports to streamline internal audits.
-Managed and optimized 50+ EDI pipelines via Azure Data Factory.
-Processed 2TB+ of data using Databricks for business usability.
-Built and maintained 5 web applications using Django, Flask, React, and NextJs.
-Visualized complex data sets into 30+ actionable insights using Dash and Plotly.
-Improved time series data forecasting by 15% through sophisticated methods.

RadianArc Technologies Pvt Ltd
Solutions Architect
May 2019 - April 2021 (2 years)
Mumbai Area, India

-Specialized in digital signal processing, achieving 90%+ accuracy in anomaly detection through advanced statistics and visualizations.
-Managed data collection from sensors, focusing on preprocessing for a 95% accurate time-to-failure prediction.

-Developed KPI dashboards, reducing machine downtime by 50% and boosting productivity.
-Leveraged Azure Data Lake and Python, deploying multiple scalable business solutions.

Tata Consultancy Services
Software Engineer
November 2017 - September 2019 (1 year 11 months)
India

Automated testing processes using Selenium with the Cucumber framework, enhancing efficiency and accuracy.

Conducted comprehensive performance testing using LoadRunner.

Managed manual testing for Point of Sale (POS) systems, ensuring optimal functionality and performance.

Independently handled an early-stage project, which accelerated my learning and skill acquisition.

Developed an innovative Augmented Reality application concept, which was shortlisted for further development in the company's Innovation labs.

ISRO - Indian Space Research Organization
Intern
May 2016 - June 2016 (2 months)
Hyderabad Area, India

Implemented frame-sync generation and detection logic utilizing TTL IC's, contributing to the organization's technical advancements.

Successfully interfaced the 8751 micro-controller with HDSP display, enhancing display capabilities.

Teach2Change
Photographer
April 2015 - October 2015 (7 months)

Engaged in capturing documentaries featuring emerging grassroots innovators across Andhra Pradesh.

Assisted in collating their innovative ideas, providing them a platform to voice their concerns and challenges to the world.

Promoted awareness and advocacy for the potential impact of these grassroots innovations.

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Education

George Mason University

Master's degree, Data Analytics · (August 2022 - May 2024)

Gandhi Institute of Technology & Management (GITAM) University, Visakhapatnam

Bachelor of Technology - BTech, Electrical, Electronics and Communications Engineering · (2013 - 2017)

NRI Academy

Intermediate, MPC · (2011 - 2013)

Vikas The Concept School

School, Foundation