ADITYA YOGESH NAIR

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OBJECTIVE

I'm an aspiring Data Scientist aiming to use my expertise in Large Language Models, Convolutional Neural Networks, and optimization to contribute to research roles that have a practical impact.

EDUCATION

Master of Computer Science (Data Science), EURECOM, Sophia Antipolis

Expected Sept 2024

Relevant Coursework: Advanced Statistical Inference, Deep Learning,

Distributed Systems and Cloud Computing

Bachelor of Technology (Electronics and Communication), Amrita University

2018 - 2022

GPA: 8.26/10

EXPERIENCE

Research Trainee Amadeus IT Group March 2024 - August 2024

Bel Air

• Developing a method for automatically optimizing prompts using attention maps from transformer encoders

Research Intern

July 2023 - Sept 2023

Laboratoire I3S, Center National De La Recherche Scientifique

Sophia Antipolis

- Achieved 90% sparsity with L1∞ projection on a Convolutional Variational Autoencoder (CVA)
- Optimized CVA for Base-4 DNA Encoding using Shannon Fano Encoder

Data Science Intern

Nov 2021 - Jun 2022

3Analytics

USA (Remote)

- Automated Naranjo and WHO drug reaction algorithms using Natural Language Processing (Spacy and BioBERT)
- Build COVID-19 Diagnostic Kit for production, with 92% accuracy

PROJECTS

Large Language Models (LLMs) for Socratic Method Our project focused on using the Socratic Method to facilitate learning through self-discovery and reasoning. To this end, we employed Reinforcement Learning with Human Feedback (RLHF).

Querying LLMs using SQL Developed Galois, a prototype software combining traditional database architecture and retrieval methods with unique operators for LLM querying to avail its hidden knowledge. We focused on robustness and diversity of outcomes.

Determining the Effect of Correlation between Asthma/Gross Domestic Product and Air Pollution The study examined the relationship between air pollution, asthma, and GDP across 20 U.S. states over two decades, leading to the creation of a predictive model from these variables

LANGUAGES

• English (IELTS 8.0/9.0), French, Hindi, Tamil, Malayalam