Adithya V Ganesan

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Education

Stony Brook University, Stony Brook NY

PhD in Computer Science. Advised by Prof. H Andrew Schwartz Master of Science in Computer Science

Anna University, Chennai India

Bachelor of Engineering in Computer Science

Research Experience

Research Software Engineer

 $Uber \mid Applied \; AI$

- Trained deep networks to predict opportunities in marketplace through learning a probabilistic mixture model
- Better performance than current deployed solution by 8.3% RMSE on average and stark improvements in predicting long tail
- Implemented the probabilistic loss on PyTorch in Uber's deployment environment for wider adoption across teams

Graduate Research Assistant

Non-Proliferation & National Security Dept. | US Dept. Of Energy

- Developed a general purpose python library for modelling illicit intent detection from sequence of search queries
- The library was built to perform self-supervised learning for early intent (event) detection, integrating expert judgement in the loop

Lead Data Scientist

Motorq | Connected Car Data Platform

- Carried out analysis on a number of vehicle parameters for more than 10,000 vehicles collected over 3 months
- Devised a streaming algorithm to detect refueling events with constant computation and memory, with robustness to noise caused by the after-market devices as well as the mechanical floats in the fuel tanks
- Characterized discrepancies caused by after-market devices in the data for future tagging

Undergraduate Research Assistant

Solarillion Foundation | Research Foundation

- Research focused on building models for non-stationary time-series in volatile systems
- Headed a team to build a day ahead food sales prediction model for India's leading multiplex chain, saving 170 units per day

SELECT RESEARCH PUBLICATIONS

Socialite-Llama: An Instruction-Tuned Model for Social Scientific Tasks [EACL 2024]

Archetypes and Entropy: Theory-Driven Extraction of Evidence for Suicide Risk [CLPsych@EACL 2024]

Systematic Evaluation of GPT-3 for Zero-Shot Personality Estimation [WASSA@ACL 2023]

WWBP-SQT-lite: Multi-level Models and Difference Embeddings for Moments of Change Identification in Mental Health Forums [CLPsych@NAACL 2022]

Empirical Evaluation of Pre-trained Transformers for Human-Level NLP: The Role of Sample Size and Dimensionality [NAACL 2021]

DeepTrace : Generic Deep Framework for Cross-Domain Univariate and Multivariate Time Series Forecast [IWANN 2019]

Forecasting Food Sales in a Multiplex using Dynamic Artificial Neural Networks [CVC 2019]

Skills

Languages: Python, C/C++, MySQL, Shell, HTML/CSS, Javascript, LATEX Libraries/Frameworks: PyTorch, PySpark, Numpy, Matplotlib, Git, Hadoop, Docker Cloud platforms: GCP, Azure Hardware: Arduino, Raspberry Pi Misc: Offering comic relief during nerve wracking moments

About Me

I am a PhD student working in an inter-disciplinary environment of psychologists, computer scientists and linguists as a part of the World Well Being Project. In a journey to better understand humans, my research focuses on analyzing and modelling human attributes through behavioral and linguistic cues, particularly using deep learning techniques. This unique problem space in conjunction to my urge to take on challenges has given me the opportunity to learn several concentrations. This includes natural language processing, hierarchical approaches, longitudinal methods and evaluation methods to list a few.

GPA:3.94 Expected May 2026 May 2021 GPA:8.1/10 May 2019

Sep. $2022 - Dec \ 2022$

Dec. 2020 - June 2021

June 2018 – Jan. 2019

Jan. 2017 – May 2019