Supriya Manna

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INTRODUCTION

As a third-year student in Computer Science and Engineering, I am deeply passionate about understanding how society works and constantly revolves around the pool of different schools of thoughts. I have some experience in constraints programming, operations research, and optimization problems, designing and analyzing (meta)heuristics and algorithms. Currently, I am working on the explainability of black-box models in the presence of Human-in-the-loop, analyzing xAI paradigms in terms of model interoperability and trustworthiness. I aspire to work in theoretical & computational social science, complex model explainability, and Human-AI trust, and I am excited to contribute meaningfully to the development of AI models that are not only accurate but also transparent, trustworthy, and socially responsible.

EDUCATION

SRM University, AP   Sept 21- Sept 25
Bachelor of Science in Computer Science and Engineering (Hons)   *Current GPA: 9.02/10.00*

COURSEWORK

Grades: comprehensive grade card here

Relevant courses with grades: Intro to Programming with C (9/10), Object-Oriented Programming with C++ (9/10), Data Structures (8/10), Design and Analysis of Algorithm (10/10), Discrete Mathematics (10/10), Formal Language and Automata Theory (10/10), Operating System (10/10), Java (10/10), Python (9/10), Single and Multi-variable Calculus (9/10), Probability and Statistics (8/10), Artificial Intelligence, DBMS, Computer Networks, Linear Algebra(all in progress)

Awards: Academic scholarship holder (3 times in a row)

SKILLS

Languages: C/C++, Java, Python, MATLAB, Bash, LaTeX

Tools, Libraries and Frameworks: Git/GitHub, NumPy, pandas, scikit-learn, Matplotlib, TensorFlow, LIME, SHAP, Gurobi Optimizer, Google Colab, Linux

EXPERIENCE

Research Intern | *SRM University, AP under Dr. Niladri Sett*   June 2023 – Aug 2023, Sept 2023 – Present
- Literature Reviews from various papers on explainable ML, Ml in public policy, Fairness in complex models
- Working on defining notation of trustworthiness in black-box models in the presence of Human-in-the-loop

Next Tech Lab | *SRM University*   Nov 2021 - Jan 2023
- Explored statistical learning, machine learning, mathematical programming, and advanced algorithm designing paradigm
- Explored problems in constraint programming, operational research, and game theory

Summer School, Yale University | *Yale Young Global Scholar - 2021*   July 2021
- Worked on business analytics with Python data analytics libraries.
- Recorded a podcast on how COVID-19 affected small and mid-size businesses backed with robust data and possible solutions.

PUBLICATION DETAILS

Under Review:
1. Revitalising the Single Batch Environment: A 'Quest' to Achieve Fairness and Efficiency
Authors: Supriya Manna, Dr. Krishna Siva Prasad Mudigonda
Preprint Available on arXiv
Forthcoming Chapter:
2. Need of AI in Modern Education: in the Eyes of Explainable AI (xAI)
Publication: "Blockchain and AI in Shaping the Modern Education System"
Publisher: CRC Press, Taylor & Francis Group, USA
Authors: Supriya Manna, Niladri Sett
Preprint Available on ResearchGate

PROJECT

1. Simulator for Classical Scheduling Algorithms : *HTML, Flask, Python | University Undertaken Project - 4th sem (May '23)*

2. Random TSP Solver using Ant Colony Optimization : *Python, Metaheuristic, Colab:* base implementation

HOBBIES

–Exploring Eastern Philosophies: Samkhya, Jainism, Buddhism etc.
–Used to participate in competitive programming occasionally, best achievement-**Global Rank 11** (Div 3) (Handle: vputin)