

Education

BITS Pilani K.K. Birla Goa Campus

Bachelor of Engineering

Goa, India

Nov 2020 - May 2024

- **CGPA:** 8.53/10
- **Minor in Data Science**
- **Courses:** Linear Algebra, Differential Calculus, Probability and Statistics, Data Structures and Algorithms, Discrete mathematical structures, Object Oriented Programming, Database systems, Meta Learning, Artificial Intelligence, Machine Learning, Foundations of Data Science, Applied Statistical Methods, Deep Learning, Reinforcement Learning
- **Teaching:** Meta Learning, Object Oriented Programming, Machine Learning

Experience

Adobe Media and Data Science Research

Research Associate

Noida, India

Jun 2023- Present

- Predicted and generated memorable ad content using multimodal LLMs (*Long-Term Ad Memorability*).
- Worked on evaluating and improving the persuasive abilities of LLMs (*Measuring and Improving Persuasiveness of LLMs*).
- Developed a method to improve content understanding in vision-language models using human behavioral signals (*LLaVA Finds Free Lunch*).
- Working on hypothesis generation from observable data
- **Supervised by:** Balaji Krishnamurthy, Dr. Changyou Chen, Dr. Rajiv Ratn Shah

Autonomous Agents Lab, Stanford University

Research Intern

Remote

Aug 2023-Jan 2024

- Worked on a framework to effectively generate task simulations from language input
- Released a generative simulation benchmark to assess accuracy in facilitating zero-shot transfers in reinforcement learning.
- **Supervised by:** Dr. Nick Haber and Dr. Jiajun Wu

APPCAIR Lab, TCS Research

Student Researcher

Goa, India

July 2022 - May 2023

- Worked on solving the Abstract Reasoning Challenge (ARC) with neurosymbolic techniques.
- Used meta reinforcement learning and ILP techniques to model financial markets.
- Collaborating with a team of researchers from TCS Research and **supervised by:** Dr. Ashwin Srinivasan.

Google Summer of Code

Contributor

Remote

June 2022 - Sept 2022

- Contributed to the development of ArviZ, a tool for exploratory analysis of Bayesian models, and Gen.jl, a general-purpose probabilistic programming system with programmable inference embedded in Julia.
- Developed a compatibility layer for using ArviZ visualization functionality with Gen traces, to facilitate integration between the two systems and improve their overall functionality.
- **Supervised by:** Ravin Kumar and Seth Axen.

Publications

LLaVA Finds Free Lunch: Teaching Human Behavior Improves Content Understanding Abilities of LLMs

ICLR 2025

Singapore

2025

Somesh Singh*, **S I Harini***, Yaman Kumar*, Balaji Krishnamurthy, Veeky Baths

Measuring And Improving Persuasiveness Of Generative Models

ICLR 2025

Singapore

2025

Somesh Singh*, Yaman Kumar*, **S I Harini***, Balaji Krishnamurthy

FACTORSIM: Generative Simulation via Factorized Representation

NeurIPS 2024

Vancouver, Canada

2024

Fan-Yun Sun, **S I Harini**, Angela Yi, Yihan Zhou, Alex Zook, Jonathan Tremblay, Logan Cross, Jiajun Wu, Nick Haber

Long-Term Ad Memorability: Understanding and Generating Memorable Ads

WACV 2025

Arizona, USA

2024

S I Harini*, Somesh Singh*, Yaman Kumar*, Aanisha Bhattacharya, Veeky Baths, Changyou Chen, Rajiv Ratn Shah, Balaji Krishnamurthy

Projects

DualNet for Continual Learning

Goa, India

Course Project

Mar 2022 - Apr 2022

- Implemented the paper, DualNet from NeurIPS '21, which proposes a new architecture for continual learning.
- Extended the model to be used on financial market data and achieved promising results.
- Used Mixup and other techniques to further improve the performance of the model.
- **Code can be found at:** [<https://github.com/harini-si/DualNet22>]

ATP Binding sites in protein synthesis

Goa, India

Project supervised by Dr. Swati Agrawal

Jan 2022 - Apr 2022

- Developed an ensemble model using CNNs and LightGBM for predicting ATP binding sites in protein sequences.
- Explored various feature engineering techniques to extract important structural features from the sequences, including secondary structure, physicochemical properties, and evolutionary conservation.

Source code synthesis

Goa, India

Project supervised by Dr. Swati Agrawal

Jan 2022 - Apr 2022

- Built a preliminary model for Code search, with a simple encoder decoder architecture which computes the cosine similarity of the embeddings for searching.
- Finetuned the CodeBERT model for Code Search on C/C++.
- Trained and finetuned a code clone detection model across multiple languages.

Skills

Languages Python, Java, C, C++, Julia, Scala.

Toolkits Pandas, PyTorch, NumPy, Scikit-learn, Tensorflow, Linux

Miscellaneous Linux, Shell (Bash/Zsh), \LaTeX , Git.