

Research Engineer with experience in evaluating planning and reasoning in LLMs,  
with keen interest in AI Safety & Neuroscience domains.

## PROFESSIONAL EXPERIENCE

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|---|--|---|
| <b>AI Research Intern</b>   | <b>Fujitsu Research</b>                    | <b>Jan 2025 – Present</b>               |
| <ul style="list-style-type: none"><li>Paper accepted to <b>EMNLP'25 Main</b>: proved the inability of LLMs to do planning in Enterprise Domain.</li><li>Responsible for designing all baselines in LangChain and DSPy frameworks and providing insights into 500+ tasks of our benchmark for 18+ data domains, limiting the best performing LLM to just <b>38.2%</b>.</li><li><b>First Author</b> of an Technical Report of Open-Source python library for developing Agentic Pipelines.</li><li>Responsible for entire LangGraph-based backend, orchestration of all modules, human-in-the-loop, <b>integrated MCP</b>- currently being used by Fujitsu EU Business Unit Clients &amp; person of contact between Fujitsu America and Japan.</li><li>Built <b>CodeHealer</b>: a framework to not only find and raise issues but also solve them within our Library.</li><li>Built <b>CodeSuperOptimizer</b>: a framework to optimize Agentic Workflows over factors like cost / time, used to improve tests coverage of our own library from <b>51% to 86%</b>.</li><li>Demonstrated CodeHealer and CodeSuperOptimizer to CTO of Fujitsu as well as Senior Project Directors.</li></ul> |  |   |
| <b>NLP Prism Research Intern</b>  | <b>Samsung R&amp;D Institute</b>           | <b>Sept 2024 – Dec 2024</b>             |
| <ul style="list-style-type: none"><li>Built a 3-stage Synthetic Data Generation Pipeline for curating a high-quality dataset and implemented a 2MB lightweight model, optimized for edge-deployment on Samsung devices.</li><li>Worked under <b>Ms. Shilpa Singh</b>, Sr. Chief Engineer at SRI-B, addressed an industrial problem as a part of the Samsung PRISM worklet.</li></ul>  |  |   |
| <b>Policy Optimization Intern</b>   | <b>University of South Carolina, AIISC</b> | <b>[Part Time] Sept 2024 – Nov 2024</b> |
| <ul style="list-style-type: none"><li>Exploring Policy Optimization in LLMs by aligning models using RLHF, DPO, implementing new evaluation frameworks for analyzing the occurrence of catastrophic forgetting under the guidance of <b>Prof. Amitava Das</b>, Wipro AI Labs.</li></ul>   |  |   |
| <b>GenAI Trainee</b>  | <b>Intel Unnati Industrial Training</b>    | <b>May 2024 – July 2024</b>             |
| <ul style="list-style-type: none"><li>Developed an <b>Intel Virtual Assistant Chatbot</b> by fine-tuning Llama2-7b model using Intel OpenVINO toolkit and Hugging Face Optimum-CLI tool, as a part of the Intel Unnati Industrial Training.</li><li>Achieved <b>56% faster</b> inferencing speed using Intel OpenVINO IR Format Model in comparison to original Hugging Face models on Intel Xeon Gold Processors.</li></ul>  |  |   |
| <b>Data Analyst Intern</b>  | <b>Godrej Infotech Ltd.</b>                | <b>Aug 2023 – Sept 2023</b>             |
| <ul style="list-style-type: none"><li>Effectively <b>condensed multi-page</b> Excel Reports into a single-page interactive dashboard by utilizing Power BI Transform and DAX, with insightful visualizations.</li><li>Developed a dynamic real-time Sales dashboard with integrated custom tooltips and drill-throughs, <b>leveraging AI</b> to assist customer Q&amp;A and aide in decision making.</li></ul>  |  |   |

## RESEARCH PUBLICATIONS

- **Can LLMs Help You at Work? A Sandbox for Evaluating LLM Agents in Enterprise Environments**- Empirical Methods in Natural Language Processing [EMNLP'25, Main Conference]
- **A vs B: A novel dataset for Fine-Grained A/B classification in Real Life Scenarios** [ICSSAP'25, Under Review, Done w/ SRI-B]
- **ReBench: Disentangling Knowledge for Purely Evaluating Reasoning in LLMs**- International Conference on Learning Representations [Targeting ICML'25]
- **Efficient CNN-Based Face Mask Detection for Public Safety in Crowded Scenarios** – International Conference on Sustainable Advanced Computing [ICSAC 2024, Springer Nature Intl. Conference]

## ACHIEVEMENTS AND EVENTS

- Winner Samsung** Metaverse Hackathon, demonstrated innovative solution blending VR & ML, awarded **Rs. 40,000**.
- Shortlisted to be part of **AMD** Hackathon, led my team to **Top 4** out of 50+ total teams, displaying leadership & determination.
- Invited to the OpenModels meetup by the Gemma Team at **Google Carina**, along with other experienced developers.
- Selected to be part of several prestigious events like **Microsoft Research** India Summit 2025, **NVIDIA Deep Learning Institute** Workshop & Applied Research Open House at **Sakana AI**.

## PROJECTS

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### **Evolveon – Agentic SuperOptimizer**, Genetic Algorithms, Optimization, Fujitsu

- Developed an in-house version of OpenEvolve for automated optimization for cost & time of all Agentic Workflows built using the recently built agentic framework, using the very same framework itself.
- Matched SOTA through the in-house implementation on the circle packing problem used by DeepMind, with sum being 2.6353, used the framework to improve test coverage of our own library's LLMs module from 51% to 86%.

### **VITGenius**, RAG, Gemini-1.5-pro, ChromaDB

- Surveyed faculties and students & developed VITGenius which integrated our University Portal to a RAG-App which uses Academic regulations, map of VIT, etc to help parents during fresher induction, provide faculties and students with easier access of information.
- VITGenius uses ChromaDB as its vector database, embedding-001 model for embeddings and Gemini-1.5-pro for answer generation.

### **Tutori.AI**, LLM, VR, Unity

- Engineered Tutori.ai, a fully personalized ML Application in which a 3D VR Tutor is capable of seamless speech-to-speech conversations using convai API in Unity Framework.
- Implemented lip synchronization and head & vision tracking in VR, created a custom knowledge bank, prompt-tuned as an ML Tutor for enhanced user experience.

## EXTRA-CURRICULARS

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### **Online Courses**

- Courses covered include- MIT 9.13: The Human Brain, ongoing- MIT 9.01 Neuroscience and Behavior, Stanford: Human Behavioral Biology, MIT 9.00: Introduction to Psychology.

### **President, Blitz Gaming Club | Vice President, LA Gaming Club**

*Competitive Brawl Stars – 2018 to Present*

- Competed in Brawl Stars, reached top 50 team in India (2018), as a Vice-President at LA Gaming Club managed online tournaments through discord for 1k+ members on the Board of Directors team (2018-2020), currently a President of a Blitz Gaming Club (2020-present).



## EDUCATION

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- B. Tech - Computer Science and Engineering, Vellore Institute of Technology, Chennai. [2021-2025]
  - **CGPA - 9.34**
  - Coursework – Deep Learning, Explainable AI, Machine Vision, Speech Language Processing, Data Structures and Algorithms, Data Analysis, Operating System, DBMS, Theory of Computation, Reinforcement Learning
- HSC – 92%, SSC – 90% [2012-2021]

## CERTIFICATIONS

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- ♦ Google Cloud Digital Leader 
- ♦ NPTEL – Python Programming [Top 5%] 
- ♦ Deep Learning Specialization 
- ♦ TensorFlow Developer : Professional Certificate 