

CHANDRA JONNALAGADDA

Providence, RI

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Education

Brown University

Master of Science in Computer Science

Sep 2025 – May 2027*

Providence, RI

Indian Institute of Technology (IIT), Tirupati

Bachelor of Technology in Computer Science and Engineering (CGPA: 9.37/10.0)

Nov 2021 – May 2025

Tirupati, India

Relevant Coursework

Machine Learning, Deep Learning, Reinforcement Learning, Computational Methods in Optimization, Probability and Statistics, Linear Algebra, Data Structures and Algorithms, Design and Analysis of Algorithms

Experience

Robert Bosch Center for Data Science and AI

Research Intern (Guide: Prof. Balaraman Ravindran)

May 2024 – Jul 2024

Chennai, India

- Designed graph-to-text explanation frameworks for Heterogeneous GNNs using Graph Explainers, domain-specific LLMs, and Chain-of-Thought (CoT) prompting, improving interpretability for medical and legal GNN models.
- Processed and structured legal and medical text data into multi-entity graphs, enabling graph modeling of over 11,000+ legal and 47,000+ medical case-document relationships for downstream GNN-based prediction.
- Developed GNNs for legal and medical applications, achieving AUCs of 0.94 and 0.86, and F1 scores of 0.78 and 0.88 (multilabel) on the Legal Judgment Prediction and Medical Procedure Necessity Prediction tasks, respectively.
- Built custom HeteroGNNExplainer and PaGE-Link for subgraph- and path-based link prediction on graphs.

Chimple Learning

Software Developer Intern

Jun 2023 – Jul 2023

Bengaluru, India

- Developed a full-stack multiplayer quiz platform using React, React Router, Firebase Authentication, Firestore, and Firebase Functions, supporting hosting, creation, joining, and real-time multiplayer quizzes.
- Built a dynamic in-app quiz editor for teachers with React hooks and Firestore-secured validation.
- Enabled session tracking and performance history, logging game results in Firestore and presenting users with a viewable history of past quizzes (both single- and multiplayer), enhancing learner reflection and engagement.
- Driving foundational learning for 300+ students in 10 public schools across India.

Projects

Bachelor's Thesis: Risk-Sensitive Reinforcement Learning | *RL, PyTorch, Gymnasium*

Aug 2024 - May 2025

- Developed two novel risk-sensitive actor-critic algorithms grounded in exponential utility theory, enabling fine-grained control over tail behavior in reinforcement learning using linear function approximation and single-sample SPSA.
- Proved convergence of the nonlinear exponential Bellman operator, enabling a risk-sensitive policy iteration framework.
- Implemented risk-sensitive algorithms with provable guarantees, improving robustness on Cart-Pole and Acrobot.

Agentic RAG for Legal QA on Privacy Policies | *HuggingFace, LangChain, Docker*

Nov 2024 - Dec 2024

- Developed an Agentic RAG pipeline with a custom Evidence Graph Generator, improving LLM factuality and reasoning, boosting accuracy by 15% over baseline with minimal latency overhead.
- Integrated CoT prompting, multi-source retrieval (Web Search + VectorDB), and Guardrails for coherent, safe outputs.
- Achieved 91% accuracy with 133s latency, balancing depth, safety, and responsiveness.

MiFeMoDEP: Mixed Feature Model for Software Defect Prediction | *PyTorch, PyG*

Feb 2024 - Apr 2024

- Implemented a CodeBERT-CPG framework to enhance code analysis through semantic and structural capture.
- Employed LIME to generate defect probability scores, enhancing model interpretability.
- Achieved SOTA defect prediction using just 10% of data, highlighting model efficiency and generalization.

Technical Skills

Languages: Python, C/C++, Java, JavaScript, SQL

Developer Tools: Git, Vim, Docker, Bash, JOERN

Technologies/Frameworks: Linux, PyTorch, LangChain, Unsloth, HuggingFace, TensorFlow, MERN, Firebase

Leadership / Extracurricular

AI/ML Club

Club Head

June 2024 – May 2025

IIT Tirupati

- Mentored 3 student projects (5+ members each) in RL, DL for Computer Vision and AI Agents.
- Directed a 27-member team in organizing workshops, hackathons, talks, and contests, reaching over 500+ participants.
- Secured 2 corporate sponsorships, boosting club budget by 185% over college funding.