Srihas Rao

224-650-4224 | srihasrao@gmail.com | https://www.linkedin.com/in/srihas-rao/ | Website

EDUCATION

University of Illinois at Urbana-Champaign   Champaign, IL
Bachelor of Science - Computer Science; Minor in Statistics, GPA: 3.90   *Graduating May 2026*
Coursework: Data Structures & Algorithms, CS Probability & Statistics, Numerical Methods, Computer Architecture

EXPERIENCE

Reconstruct   September 2024 – Present
Software Engineer   *Champaign, IL*
- Developing a GPT-finetuned chatbot for a construction site with Professor Mani Gopravar.
- Integrating a data, API, and application layer with mobile interface to provide document-based insights.

SilverBrain AI   June 2024 – August 2024
Software Engineer   *Zurich, Switzerland*
- Worked with Celsius, a platform enhancing AI pipeline management by reducing costs by 40% and tripling speed.
- Developed a Python pipeline for TaskAPI with MongoDB, automating AI task evaluations and data collection.
- Integrated infrastructure into client side in Python and conducted unit testing of web application and API.
- Implemented Continuous Integration (CI) pipeline using YAML configurations to automate testing.

Scale AI   January 2024 – June 2024
AI Software Engineer   *Remote*
- Collaborated with OpenAI engineers to use Reinforcement Learning to improve ChatGPT-4 on coding outputs.
- Conducted comprehensive tests and improvements on GPT coding outputs across Python, Java, SQL, and C++.
- Refined prompt engineering techniques by identifying prompts that caused hallucinations, improving reliability.

Large Language Model Social Simulation Research Group   August 2023 – January 2024
Researcher & Subgroup Leader   *University of California, Santa Barbara*
- Simulated Hobbesian Social Contract Theory through LLM-Based Agents with Professor Misha Sra.
- Designed JavaScript application simulating the environment and training LLM agents on their societal role.
- Published paper in Arxiv - http://arxiv.org/abs/2406.14373; Presented at AI Behavioral Science Conference.

Cognautica   August 2023 – May 2024
Founding Engineer, Lead NLP Engineer   *Champaign, IL*
- Pioneered platform to autograde essays, short answer, and completion questions, reducing grading time by 80%.
- Led NLP side and developed rubric generation, essay grading, and computer vision tool for paper tests in Python.

Advanced Micro Devices (AMD)   August 2023 – May 2024
Campus Project Software Engineer   *Champaign, IL*
- Analyzed hardware performance counters data with malwares installed for malware detection in hardware.
- Developed a Recurrent Neural Network to detect an expected 90% of malwares and integrated it into AMD APUs.

Technisar Solutions Inc.   June 2023 – August 2023
Software Engineer   *Deerfield, IL*
- Created a learning management portal for Gate Gourmet consolidating all learning content using Java and React.

PROJECTS

AI Sales Helper | *RestAPI, TensorFlow, React*   TikTok Hackathon, 2024
- Built an AI Sales Helper for the TikTok Hackathon to create a real-time customer interaction tool.
- Developed a product suggestion system for sales personnel based on BERT and a fine-tuned Llama model.

TECHNICAL SKILLS

Languages: Java, Python, C++, SQL (Postgres), JavaScript, HTML/CSS, R
Frameworks: React, Node.js, Flask, MongoDB, Django, FastAPI
Developer Tools: Git, Docker, TravisCI, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse
Libraries: pandas, NumPy, Matplotlib