Saathveek Gowrishankar

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EDUCATION

University of Illinois Urbana-Champaign

B.S. in Computer Engineering, Certificate in Data Science

Nanyang Technological University

Cultural exchange semester in Singapore

Jan 2025 - May 2025

Expected Graduation: May 2026

EXPERIENCE

Infrastructure Engineering Intern

May 2025 - Present

Blue Cross and Blue Shield of Illinois

- Supported initial ML adoption in capacity planning, reporting to the Executive Director of Infrastructure.
- Developed ARIMA models to forecast CPU, RAM, and storage demand, enabling proactive upgrades.
- Automated BI reporting to analyze resource usage across 2,700+ applications, helping prevent server failure.
- Analyzed annual membership and application usage trends to inform strategic decisions and AIOps initiatives.
- Consolidated data from Dynatrace, SolarWinds, and storage reports into Databricks for ML-driven analysis.

Software Engineering Intern

May 2024 - Aug 2024

Mullbry, Inc.

- Collaborated with CEO and senior leaders to identify and translate needs into technical solutions.
- Integrated OpenAI API function calling in Python to accelerate borrower approval workflows by 20%.
- Built a flexible testing framework to evaluate various LLMs for accuracy and efficiency across diverse use cases.
- Operated with high ownership in a fast-paced startup, balancing immediate needs with long-term goals.
- Automated the generation of unique client login QR codes, streamlining the client onboarding process.

Human-Robot Interaction Researcher

Aug 2022 - Present

Human Factors and Aging Lab at UIUC

- Co-authored a comprehensive review on the evolving relationship between older adults and assistive technologies.
- Optimized data collection to accelerate the project timeline while staying aligned with key research questions.
- Worked with principal investigator, applying critical thinking skills while independently managing deadlines.

LEADERSHIP

President and Advisor

Jan 2024 - Present

Engineers Without Borders at UIUC

- Led an executive board of over 20 chapter leaders, overseeing a chapter of over 170 active members.
- Pioneered a membership incentive system, improving membership by 81% and member retention by 26% YoY.
- Advised on the operations of 4 independent project teams with a total budget exceeding \$150,000.
- Collaborated with industry professionals to design a concrete vehicular bridge for a rural village in Malawi.

PROJECTS

Keyword Spotting with Tiny Machine Learning

Jan 2025 - May 2025

Nanyang Technological University

- Deployed real-time audio classification on an Arduino BLE Sense using TensorFlow Lite for Microcontrollers.
- Trained a lightweight CNN in Keras for on-device keyword spotting in resource-constrained environments.
- Optimized inference and latency with quantization and iterative testing to ensure reliable deployment.

A Machine Learning Approach to Understanding Older Adults' Perspectives

Jan 2023 - Apr 2024

Human Factors and Aging Lab at UIUC

- Developed a machine learning model to analyze and estimate older adults' trust of novel assistive technologies.
- Reviewed studies analyzing how prior technology familiarity influences trust in emerging technologies.
- Presented findings to experts for two consecutive years at the Illinois Undergraduate Research Symposium.

SKILLS

Languages: Python, C++, DAX

ML, DS Libraries: TensorFlow, Keras, statsmodels, scikit-learn, Pandas, NumPy, Seaborn, Databricks

Tools: Azure DevOps, Git, OpenAI Function Calling API, Power BI, Excel, Dynatrace

Courses: Parallel Programming, Data Structures, Algorithms, Computer Systems Architecture