Saathveek Gowrishankar

sg59@illinois.edu • 331-262-3972 • linkedin.com/in/saathveek • saathveek.com • github.com/saathveek

EDUCATION

University of Illinois Urbana-Champaign   Expected Graduation: May 2026
B.S. in Computer Engineering, Certificate in Data Science

Nanyang Technological University   Jan 2025 - May 2025
Cultural exchange semester in Singapore

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

EXPERIENCE

Infrastructure Engineering Intern   May 2025 - Present
Blue Cross and Blue Shield of Illinois
- Integrated machine learning into capacity planning, reporting to the Executive Director of Infrastructure.
- Developed ARIMA models to forecast CPU, RAM, and storage demand, enabling proactive upgrades.
- Automated Dynatrace queries and Power BI reporting for 2,700+ applications, reducing server failure risk.
- Analyzed membership and resource usage trends to guide AIOps efforts on scalability planning.
- Consolidated data from Dynatrace, SolarWinds, and storage logs into Databricks for use in capacity analysis.

Software Engineering Intern   May 2024 - Aug 2024
Mullbry, Inc. (Startup)
- Collaborated directly with the CEO to transform manual processes into automated, AI-driven workflows.
- Implemented OpenAI API function calling in Python to accelerate borrower approval workflows by 20%.
- Built a modular testing framework to evaluate LLM accuracy and performance across diverse tasks.
- Delivered weekly solution updates while designing backend systems for long-term scalability.
- Designed a Node.js-based system to generate unique client login QR codes, streamlining client onboarding.

Human-Robot Interaction Researcher   Aug 2022 - Present
Human Factors and Aging Lab at UIUC
- Co-authored a pending publication on the evolving relationship between older adults and assistive technologies.
- Optimized data collection and citation generation via automated Python scripts, accelerating project timelines.
- Managed data, preparation, modeling, and analysis, connecting regularly with lab leaders on evolving objectives.

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 engineering service projects with a total budget exceeding $150,000.
- Mediated conflicts and fostered mentorship, strengthening chapter cohesion and sustaining long-term momentum.
- Collaborated with industry professionals to design a concrete vehicular bridge for a rural village in Malawi.

PROJECTS

Keyword Spotting with Tiny ML   Jan 2025 - May 2025
Nanyang Technological University
- Deployed real-time audio classification on an Arduino BLE Sense using TensorFlow Lite for Microcontrollers.
- Trained a quantized CNN in Keras for on-device keyword spotting in resource-constrained environments.
- Validated inference accuracy and latency with real-time benchmarking and iterative model compression.

An ML Approach to Understanding Older Adults' Perspectives   Jan 2023 - Apr 2024
Human Factors and Aging Lab at UIUC
- Built Lasso and Ridge supervised regression models to estimate older adults' trust in novel assistive robots.
- Analyzed how prior tech familiarity impacts older adults' willingness to interact with emerging technologies.
- Presented findings for two consecutive years at the Illinois UGR Symposium to an audience of experts and peers.

SKILLS

Languages: Python, C++, C, DAX
ML/DS: TensorFlow, Keras, statsmodels, scikit-learn, Databricks, Pandas, NumPy, Seaborn
Tools: Azure DevOps, CUDA, Git, Docker, OpenAI APIs, Dynatrace, SolarWinds, Power BI, Excel