# Saathveek Gowrishankar

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

## **EDUCATION**

## University of Illinois Urbana-Champaign

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

## Nanyang Technological University

Study abroad semester in Singapore

Jan 2025 - May 2025

May 2025 - Aug 2025

Expected Graduation: May 2026

Relevant Coursework: Tiny Machine Learning, Parallel Programming, Algorithms, Data Structures, Data Science

## **EXPERIENCE**

## Infrastructure Engineering Intern

Blue Cross and Blue Shield of Illinois

- Worked on AIOps and ML implementation, reporting directly to the Executive Director of Infrastructure.
- Developed ML models to forecast CPU, RAM, and storage demands, enabling proactive infrastructure upgrades.
- Built BI dashboards to analyze resource usage across over 2700 applications, reducing risk of server downtime.
- Analyzed annual membership trends and developed clear visualizations to support strategic decision-making.

# Software Engineering Intern

May 2024 - Aug 2024

Mullbry, Inc.

- Collaborated with CEO and senior leaders to define company needs and translate them 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 application onboarding process.

#### **Human-Robot Interaction Researcher**

Aug 2022 - May 2025

Human Factors and Aging Laboratory

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

#### **PROJECTS**

## Keyword Recognition with Tiny Machine Learning

Jan 2025 - May 2025

- Deployed a real-time audio keyword spotting system on an Arduino BLE microcontroller using TensorFlow Lite.
- Built a lightweight CNN for on-device audio processing, enabling interaction in low-resource environments.
- Optimized model performance and system latency through quantization and rigorous testing, ensuring reliability.

#### A Machine Learning Approach to Understanding Older Adults' Perspectives Jan 2023 - Apr 2024

- 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 for two consecutive years to experts at UIUC's Annual Undergraduate Research Symposium.

### LEADERSHIP

## President and Advisor

Jan 2024 - Present

Engineers Without Borders UIUC

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

#### **SKILLS**

Languages: Python (Pandas, NumPy, Seaborn), ML Libraries (TensorFlow, scikit-learn), C++, Assembly Tools: Azure DevOps, Git, Power BI, Excel, Databricks, Dynatrace, OpenAI Function Calling API