

# Saketh Reddy

480-886-4898 | [yssaketh@gmail.com](mailto:yssaketh@gmail.com) | [linkedin.com/in/saketh-reddy-ys/](https://www.linkedin.com/in/saketh-reddy-ys/) | [github.com/SpiritSeal](https://github.com/SpiritSeal)

## EDUCATION

### Georgia Institute of Technology

*Bachelor's of Science in Computer Science*

Atlanta, GA

Aug. 2023 – (Exp) Dec. 2026

### Stanford University

*Summer Semester: Technology Entrepreneurship (ENGR145S) and Visual Thinking (ME101)*

Palo Alto, CA

Jun. 2021 – Aug. 2021

## EXPERIENCE

### Software Engineer Intern

June 2023 – August 2023

TIAA

Charlotte, NC

*Cybersecurity Application Developer*

- Developed modular chatbot framework leveraging NLU to answer domain-specific questions
- Contributed 5k+ lines integrating interface and API handlers into established Angular/ ASP.NET codebase

*Project Manager ( 2023 TIAA Intern Hackathon)*

- Led team of 10 interns with diverse backgrounds and skillsets to develop a Generative AI-powered solution addressing longstanding company pain points
- Won 1st Place Prize and opportunity to present solution onstage to TIAA's CTO during the T3Hack Conference

### Cyber Security Research Intern

February 2023 – May 2023

*SEFCOM Lab @ Arizona State University*

Tempe, AZ

- Developed Retroperm, a modular rule-based static analysis library capable of detecting privacy violations within compiled binaries
- Bundled and published library to PyPI, enabling it to be efficiently leveraged in future security research applications
- Created and presented separate technical and nontechnical presentations at conclusion of project, showcasing work to fellow lab members and high school peers/ faculty respectively
- Learned about and engaged in the scientific research process, with an emphasis on application security research

### IoT Embedded Systems Software Engineer Intern

June 2019 – August 2021

*Discount Tire*

Scottsdale, AZ

- Designed IoT devices with ESP32s and sensors to automate vehicle tracking in Discount Tire service bays, integrating seamlessly with SAP HANA for efficient data storage and analysis, optimizing bay performance
- Gained expertise in Software Engineering, Electronics, 3D modeling, and additive manufacturing for mass production while enhancing skills in rapid prototyping and effective communication during project tenure

## PROJECTS

### Retroperm | Python, angr, Flask, x86, Gut

February 2023 – May 2023

- Platform-agnostic retroactive effective permission generation system for compiled executable programs
- Leveraged the angr static binary analysis library in order to explore executable functionality inside a sandbox
- Implemented Reaching Definition Analysis in order to validate syscall arguments against modular blacklist
- [github.com/SpiritSeal/retroperm](https://github.com/SpiritSeal/retroperm)

### bubblemap.app | React, Typescript, Firebase, Git

September 2021 – October 2022

- Led team over 12 months to design, iterate, and develop novel fullstack AI-copiloted mind mapping web app
- Won Congressional App Challenge (1st place District AZ06)
- [github.com/SpiritSeal/bubblemap](https://github.com/SpiritSeal/bubblemap)

## TECHNICAL SKILLS AND AWARDS

**Languages:** Python, Firebase, JavaScript/ TypeScript, HTML/CSS, C++, C#

**Frameworks:** React, Angular, ASP.NET, Flask, Material-UI

**Developer Tools:** Git, Docker, Firebase, PyPI, VS Code, Visual Studio, PyCharm, Webstorm

**Libraries:** langchain, angr, z3, NumPy, Matplotlib

**Awards:** Eagle Scout, Presidential Volunteer Service Award Gold, National Cyber Scholar with Honors, CAC Winner