SAKETH REDDY

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EDUCATION

Georgia Institute of Technology   Atlanta, GA
Bachelor's of Science in Computer Science   *Aug. 2023 – Dec. 2025*
Coursework: Data Structures and Algorithms (Exp Spring '24), Honors Discrete Math, Linear Algebra

Stanford University   Palo Alto, CA
Summer Semester: Technology Entrepreneurship, Visual Thinking   *Jun. 2021 – Aug. 2021*

EXPERIENCE

Software Engineer Intern   June 2023 – August 2023
TIAA   *Charlotte, NC*

Software Engineer/ Cybersecurity Application Developer
- Developed modular chatbot generator leveraging Rasa NLU to train and deploy tailored Knowledge Base QA chatbots by fine-tuning a general QA model with domain-specific information from the app's knowledge base
- Leveraged generator to deploy 2 fine-tuned domain-specific submodels as APIs, each achieving >99.9% accuracy

Project Manager (2023 TIAA Intern Hacakthon)
- Led team of 10 interns with diverse backgrounds and skillsets to develop a Generative AI-powered social media marketing platform addressing longstanding company pain point of retirement planning apathy in young adults
- Won 1st Place Prize and presented solution onstage to company C-Suite Executives during the T3Hack Conference

Cyber Security Research Intern   February 2023 – May 2023
SEFCOM Lab @ Arizona State University   *Tempe, AZ*
- Developed Retroperm, a modular binary analysis Python library privacy violation analyzer for compiled programs
- Bundled and published library to PyPI, enabling it to be efficiently leveraged in future security research applications
- Presented multiple demonstrations at project conclusion, showcasing work to nontechnical and technical audiences

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
- Led project through 37 major iterations, ultimately achieving >99.98% accuracy in all tested environments.
- 75 devices deployed nationwide; collected insights enabled resource utilization optimization generating $167M/ year

PROJECTS

Retroperm | *Python, angr, Flask, x86, Git*   February 2023 – May 2023
- Platform-agnostic system resource deduction framework for retroactively generating "permissions" used by executable programs from their compiled binaries
- 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
- Links: — Source Code: *github.com/SpiritSeal/retroperm* — Deployed PyPI Lib: *pypi.org/project/retroperm*

bubblemap.app | *React, Typescript, Firebase, Git*   September 2021 – October 2022
- Led team over 12 months to design, iterate, and develop novel AI-copiloted mind mapping web app
- Won Congressional App Challenge; Presented project on Capitol Hill in Washington D.C. during HouseOfCode'23
- Links: — Source Code: *github.com/SpiritSeal/bubblemap* — Deployed Site: *bubblemap.app*

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, National Cyber Scholar with Honors, CAC Winner, Presidential Volunteer Service Award Gold