Varun Gangadharan

Email | Website | Github | LinkedIn

EDUCATION

University of Illinois Urbana-Champaign	Aug. 2023 – May 2024

MSc. Computer Science

University of Illinois Urbana-Champaign	Aug. 2020 – May 2023

BSc. Computer Science; GPA: 3.7/4.0
- Relevant Courses: Algorithms, Applied ML, AI, Database Systems, Web Programming
- Extracurriculars: Active member of ACM & Reflections Projections, Tutor for CS courses.

EXPERIENCE

Software Engineer I	Jul. 2024 – Present
GEICO	*Go, TypeScript, HashiCorp Vault, React, Kubernetes, Docker*	*Chevy Chase, MD*

- Architected and deployed core features for GSP (GEICO Secrets Platform), enabling secure secrets management for 150+ engineering teams across the organization.
- Solely designed, developed, tested, and shipped a Slack bot for secure one-time secret sharing, now actively used by all of GEICO's engineering workforce (4,000+ users) with 100+ daily interactions.
- Developed full-stack solutions using Go microservices and React frontend, reducing secret provisioning time and improving developer experience for 2,000+ engineers.
- Built and maintained HashiCorp Vault infrastructure, implementing automated secret rotation policies that enhanced security compliance by 35% while reducing manual overhead.

Fullstack Software Engineer Intern	May 2023 – Aug. 2023
Flow AI	*Python, ReactJS, SQL, Django, AWS*	*Austin, TX*

- Increased system throughput by 29% by engineering a Python and Django load-balancing solution, facilitating 1,200+ daily API requests with zero interruptions.
- Refined SQL database queries to achieve a 14% reduction in data retrieval times, benefiting 7 active sales agents.
- Led the migration of services to AWS, achieving 99.5% uptime and projecting an 11% reduction in server costs.

Software Engineer Intern	Jun. 2022 – Aug. 2022
Leidos	*Python, Kornshell, Bash, Docker*	*Gaithersburg, MD*

- Boosted system efficiency by overhauling a 12-year-old API backend, which directly culminated in a 26% swifter response rate and paved the way for elevated code sustainability while trimming down technical overhead.
- Optimized air traffic control systems by harnessing Python for parallel tracking, successfully handling 1,900 aircrafts simultaneously, which translated to enhanced real-time decision-making for en route controllers.
- Achieved a zero-downtime migration by pioneering coordination meetings with four departmental teams and setting up targeted communication channels, ensuring an impeccable transition for 300+ active users.

PROJECTS

FoodSage	*React, AWS Lambda, Python*	June 2023 – Aug. 2023

- Developed AI-driven nutrition recommender to provide personalized dietary plans using React and AWS Lambda.
- Utilized advanced machine learning algorithms and user profiling to achieve a 32% improvement in customization.

GeoSentiment	*Python, Tweepy, NLTK, SpaCy*	Nov. 2022 – Jan. 2023

- Created sentiment analysis tool to analyze global trends on Twitter using Python, Tweepy, and NLP libraries.
- Improved sentiment analysis accuracy by 28% through advanced text preprocessing and feature engineering.

Other Projects
- Engineered a **housing web app** for residential searches on campus using React, Node.js, and MongoDB.
- Constructed a **YouTube Bot** with Python and Selenium that opens videos when selected YouTubers upload.
- Cloned a **Unix shell** in C that prints a command prompt, reads, and runs commands from standard input.
- Devised a **Naive Bayes Model** with C++, training a computer to guess user-drawn numbers.

TECHNICAL SKILLS

Languages: Go, Python, JavaScript, C++, Java, C, HTML/CSS, SQL, Bash, MATLAB, R
Technologies & Frameworks: HashiCorp Vault, Kubernetes, Docker, AWS, ReactJS, Django, Node.js, MongoDB, Git, Vim