Varun Gangadharan

Email | Website | Github | LinkedIn

EDUCATION

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

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.

Software Engineer Intern   May 2021 – Aug. 2021
Shop2App | *ReactJS, jQuery, Node.js*   *Remote*
- Designed 6 client applications, boosting customer engagement and onboarding 20+ new customers within a year.
- Reduced page load time by 13% by creating efficient UI components using Redux and ReactJS, and incorporating HTML/CSS and jQuery on 3 pivotal pages, leading to higher user engagement.
- Seamlessly integrated front-end applications with back-end services using RESTful APIs, achieving a 17% reduction in API response times and upholding industry best practices for clean, efficient code.

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: Python, C++, Java, C, JavaScript, HTML/CSS, SQL, Kornshell, Bash, MATLAB, R, MongoDB
Frameworks: Git, AWS, ReactJS, Django, Docker, Kubernetes, Vim