Vasundhara Gatne

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Education

Virginia Tech — Blacksburg, VA
M.S. in Computer Science, GPA: 3.88 — *Aug. 2024 – May 2026*

Virginia Tech
B.S. in Computer Science, Minor in Mathematics, GPA: 3.63 — *Aug. 2021 – May 2025*

Relevant Coursework: Software Design/Data Structures, Machine Learning, Natural Language Processing

Professional Experience

Software Development Engineer Intern — May 2025 – Aug. 2025
Amazon — *New York, NY*

- Designed and implemented a RAG data pipeline integrating Amazon S3, Redshift, and AWS Lambda to dynamically update AI agent knowledge bases for campaign, traffic, and budget data
- Developed and deployed a Slack-integrated AI assistant using AWS Bedrock, API Gateway, and DynamoDB to streamline campaign performance insights
- Built robust error-handling, deduplication, and performance testing mechanisms, overall reducing manual monitoring time by 20–30 minutes daily for on-call engineers

Graduate Research Assistant — Jan. 2025 – Present
Virginia Tech | Department of Computer Science — *Blacksburg, VA*

- Developed and deployed a full-stack web application for LLM evaluation research using React, Django REST Framework, and PostgreSQL, containerized with Docker and orchestrated on Kubernetes
- Built scalable ETL pipelines for processing large-scale LLM output datasets with automated data ingestion workflows and real-time analytics dashboards
- Collaborated closely with virologists and domain experts to design AI-driven workflows for scientific information extraction from biomedical literature to support analysis of zoonotic mutations in viral protein sequences

Software Engineering Intern — Jun. 2024 – Aug. 2024
Booz Allen Hamilton — *McLean, VA*

- Developed a full-stack web application using React and Django REST Framework, integrating OpenAI's API and LangChain to enhance NLP functionality through structured prompt engineering
- Collaborated with a cross-functional team to design and deliver a synthetic data generation application, enabling users to request, refine, and access customized datasets for diverse use cases

Data Science Intern — Jun. 2023 – Aug. 2023
Carnegie Science — *Washington, DC*

- Implemented machine learning models in R leveraging data mining techniques (association analysis) to characterize objects in multi-dimensional planetary datasets
- First author on research paper that published algorithm's results and predictions; Received third place for university ICTAS Critical Technology Award
- Presented findings at American Geophysical Union Conference and American Astronomical Society Meeting

Leadership & Campus Involvement

Grace Hopper Scholarship Recipient — Nov. 2025

- Selected as 1 of 10 students to represent university at a global technology conference focused on women in computing
- Engaged with industry leaders through technical sessions, recruiting events, and professional networking

Mentor Liaison, Hypatia Engineering Living Learning Community — Aug. 2021 – May 2025

- Led operations for engineering mentoring program, overseeing a network of mentors and supporting 60-75 mentees
- Designed and delivered professional development, social programming, and K-12 engineering outreach initiatives

Technical Skills

Languages: Python, Java, TypeScript, C/C++, R, HTML/CSS, JavaScript, SQL, x86, RISC-V, MATLAB
Frameworks/Tools: Git, AWS CDK, Django, React, DSPy, IntelliJ, Eclipse, Visual Studio, Kubernetes, Docker
Libraries: OpenAI API, pandas, NumPy, LangChain, scikit-learn, JUnit, arules, PyTorch, tidyverse, dplyr, plotly