RAM VAIDYA

Education

Cornell University

January 2026 - December 2026

Master of Engineering in Computer Science

University Of Wisconsin - Madison

Bachelor of Science in Computer Science, Data Science, Mathematics

September 2021 – May 2025 *GPA*: 3.84/4.00

Experience

Software Engineering Intern

September 2024 – December 2024

Amazon

Madison, WI

- Developed a web-based pairwise ranking system for Shopbop's product catalog enhancing customer engagement by 30% and driving a 15% increase in product discovery.
- Trained and deployed a personalized recommendation engine achieving 87% accuracy on an user-item interaction dataset derived from real-time production systems.
- Designed an end-to-end serverless architectural framework using S3, CloudFront, API Gateway, DynamoDB and Lambda to ensure seamless data flow, scalability and cost-efficiency for the product.

Cloud Engineering Intern

June 2024 - August 2024

Infosys

Bellevue, WA

- Designed scalable cloud architecture solution leveraging Google Cloud Platform (GCP) services, resulting in streamlining IT processes and enhancing infrastructure efficiency by 20%.
- Conducted a comprehensive evaluation of 3 potential cloud architecture systems by defining technical and commercial categories, key parameters, and recommended the optimal solution that met 95%+ of client requirements.
- Conducted detailed vendor evaluation exercises and presented data-driven insights based on cost, performance, and reliability parameters. This helped client reduce the OPEX by 10%.

Software Engineering Intern

June 2023 - August 2023

Persistent Systems

Bellevue, WA

- Developed a full stack application using React, SpringBoot, and MySQL enhancing workflow visualization for senior client stakeholders in an energy storage solutions company. This resulted in a 20% increase in user engagement.
- Boosted the NLP output of a chatbot powered by AWS Bedrock by increasing data accuracy by 15%. Designed the backend APIs for scraping, tokenizing, and embedding data from various sources through Retrieval Augmented Generation (RAG) for a cloud-based ERP solutions client.
- Identified code vulnerabilities in web applications, exposing 7% more OWASP risks and enhancing security measures by 10% by writing various Python scripts for benchmark testing of open-source SAST tools for an industry-leading web services client.

Mathematics Course Assistant

September 2022 – December 2024

 $University\ of\ Wisconsin\ -\ Madison$

Madison, WI

• Mentored students in advanced mathematical concepts such as Linear Algebra and Differential Equations through office hours and real-time lecture support, leading to increased class participation and improved exam scores.

Projects

Polyp Detection and Measurement | Ethosh Digital

May 2024

• Developed a Python application for detecting and measuring polyps in endoscopic images using PyTorch for CNN model development and OpenCV for advanced image preprocessing, achieving 85% accuracy on the Kvasir dataset.

Secure Learning AI | Google Developer Student Hackathon

November 2023

• Developed a computer vision-based school security system using Python and YOLOv7 for real-time object detection with 90% accuracy, integrating Twilio for automated SMS alerts to law enforcement, which significantly improved threat identification and response times.

Technical Skills

Languages: Java, Python, C, C ++, C#, R, HTML, CSS, JavaScript, TypeScript, Swift, Kotlin, Go. Technologies/Frameworks: TensorFlow, Pytorch, Pandas, NumPy, SpringBoot, Flask, .NET, React, Node, MySQL, Cassandra, MongoDB, gRPC, MapReduce, BigQuery, Kafka, Spark, Hadoop, Redis, JUnit, Git, Docker, Kubernetes, Tableau, Power BI, AWS, GCP, Arduino, Linux, JIRA, Agile, Scrum, Kanban.

Certifications/Achievements

AWS Solutions Architect Associate, AWS Cloud Practitioner, Dean's List, Hackathon Winner, National Swimming Medalist