Akshai Narayan Srinivasan

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Education

University of Washington

Seattle, WA

Dual Degree: BS in Computer Science and Engineering, BS in Applied Mathematics

June 2027

Relevant Coursework: Machine Learning, Systems Programming, Data Structures & Parallelism, Hardware Software Interface, Discrete Mathematics & Probability, Multivariable Calculus, Applied Linear Algebra, Differential Equations

Technical Skills

Languages: Python, Java, C++, JavaScript, TypeScript, Dart

Databases & Cloud: PostgreSQL, MongoDB, MySQL, AWS (Lambda, API Gateway, S3, DynamoDB, Bedrock)

Frameworks & Tools: Node.js, FastAPI, Flask, React.js, Next.js, Flutter, Stanford CoreNLP, Git

Experience

DubHacks Seattle, WA

Software Developer Jan 2025 – Present

- Developing full-stack software for the largest collegiate hackathon in the Pacific Northwest (1200+hackers/judges) using FastAPI, Next.js, TypeScript, and React
- Built FastAPI judging platform with OAuth2 infrastructure, utilizing WebSockets and event-driven architecture to achieve <100 ms tracking for 150+ live sessions
- Architected production MongoDB cluster handling 376K edge requests and 122K serverless function invocations for peak hackathon traffic with zero downtime
- Designed sentiment analysis engine with proprietary ranking algorithm to evaluate 1,800+ applications, achieving 99% reduction in manual review time

Technology Consulting Association at the UW

Seattle, WA

Co-Founder and President

Jan 2025 - Present

- Founded and leading a 40+ member student organization to deliver AI-driven tech solutions for businesses
- Built pipeline of 6 active client projects within 3 months, including computer vision analytics for regional bagel chain and cloud infrastructure migration for municipal fire department
- Developed **agentic AI** outreach bot that utilizes the **Anthropic/Claude API** to discover and initiate **first-level sales funnel contact** with potential clients (2000+ leads)
- Established strategic partnerships and client relations with Pinterest, SAP, Accenture, and the Seattle Mariners

Neptune Medical Inc.

Burlingame, CA

Software Engineering Intern

Jun 2025 – Sep 2025

- Engineered control system architecture for robotic endoscope using ROS and Python, orchestrating communication between controllers, sensors, and actuators
- Built C++ fault detection framework for haptic input device with automatic failsafe protocols, preventing unsafe robot operations during live procedures
- Collaborated across engineering teams using Agile/Scrum workflows, maintaining sprint documentation in JIRA and technical specs in Confluence

Sample Projects (Portfolio: <u>akshaisrin.live</u>)

 $\textbf{FitFinder} \mid \textit{PostgreSQL}, \; \textit{Python}, \; \textit{Flask}, \; \textit{AWS} \; (\textit{Bedrock}, \; \textit{S3}), \; \textit{Flutter}, \; \textit{Dart}, \; \textit{Git}$

Oct 2024

- Created mobile fashion social media app for Android devices designed to connect people with similar fashion tastes
- Designed PostgreSQL database with indexing and query optimization for low-latency content retrieval
- Implemented Flask backend using RESTful APIs to support content delivery and session management
- Used AWS Bedrock to create AI-powered style classifications and AWS S3 to store 40,000+ image algorithm dataset

CalcMaestro.com | Python, AWS (Lambda, API Gateway, S3, DynamoDB), Git

Jan 2023

- Implemented calculus engine for calculus test-prep company able to perform differentiation and integration symbolically, generating 100,000+ practice problems with step-by-step solutions
- Architected serverless backend using AWS Lambda and AWS API Gateway to handle content requests, achieving low-latency PDF delivery from AWS S3
- Built cross-domain authentication system using AWS DynamoDB for secure content access through web tokens