

# AKSHAI NARAYAN SRINIVASAN

(425) 837-2049 | [akshai.n.srinivasan@gmail.com](mailto:akshai.n.srinivasan@gmail.com) | [linkedin.com/in/akshaisrin](https://linkedin.com/in/akshaisrin) | [akshaisrin.live](https://akshaisrin.live) | [github.com/akshaisrin](https://github.com/akshaisrin)

## Education

### University of Washington

*BS in Computer Engineering, Applied Mathematics*

Seattle, WA

June 2027

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

## Experience

### Neptune Medical

*Software Engineering Intern*

Burlingame, CA

Jun 2025 – Present

- Implementing fault injection framework in **C++** for haptic input device in robotic endoscope, validating system reliability under failure conditions
- Developing **ROS2** nodes in **Python** to enable real-time communication between controllers and endoscope hardware
- Provided technical support in navigation control system labs, debugging real-time system issues and optimizing performance during physician testing
- Managing sprint issues in **JIRA** and documenting system behavior in **Confluence** in **Agile** development environment

### DubHacks

*Software Developer*

Seattle, WA

Jan 2025 – Present

- Developing full-stack software for the largest collegiate hackathon in the PNW, supporting **1600+** hackers and judges
- Implemented hacker portal web application using **Typescript**, **React.js**, **Tailwind.css**, and **Next.js** for team collaboration, event updates, and DubCoin currency transactions
- Built **OAuth2** infrastructure to authenticate hackers via Discord and verify registration against **MongoDB** database
- Designed **greedy** scheduling algorithm to allocate judges to teams by optimizing availability and scoring heuristics

### goEzz Ride Services for Children

*Full Stack Intern*

Bellevue, WA

Jun 2022 – Sep 2022

- Built and deployed full-stack architecture for mobile Android ridesharing application processing **28,000+** rides to date
- Developed **RESTful API** endpoints in **JavaScript** for **CRUD** operations on driver/scheduling data from remote **MySQL** database
- Designed responsive UI using **Flutter** and **Dart**, enabling real-time ride tracking and status synchronization
- Integrated **Twilio API** for SMS-based **multifactor authentication**, enhancing security and identity verification

## Projects

### FitFinder | *Flutter, Dart, PostgreSQL, Python, Flask, AWS (Bedrock, S3), Git*

Oct 2024

- Created mobile fashion social media app for Android devices designed to connect people with similar fashion tastes and provide engaging fashion content
- Architected and optimized a relational **PostgreSQL** database storing user interactions, posts, and metrics with indexing and query optimization to support low-latency retrieval
- Implemented **Python/Flask** backend using **RESTFUL APIs** to support content delivery and session management
- Integrated **AWS Bedrock** to generate AI-powered style classifications and **AWS S3** for storage of **40,000+** image algorithm dataset

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

Jan 2023

- Developed website for my calculus test-prep company supporting scalable, subscription-based content delivery
- Designed **calculus engine** capable of performing **differentiation** and **integration** symbolically, and generating, solving, and providing explanations for **100,000+** practice problems
- Built serverless backend using **AWS Lambda** and **AWS API Gateway** to manage frontend requests and serve PDFs
- Leveraged **AWS DynamoDB** for secure, low-latency storage of authentication tokens and analytics data
- Implemented **cross-domain authentication system** using web tokens to securely serve PDFs hosted on **AWS S3**

## Technical Skills

**Languages:** Python, Java, JavaScript, TypeScript, C#, Dart, C++, HTML, MATLAB, LaTeX

**Frameworks & Tools:** Node.js, Flask, React.js, Next.js, Flutter, Tailwind CSS, Pandas, NumPy, Stanford CoreNLP, Git

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