

Sruthi Dacherla

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EDUCATION

University of Virginia, B.A. in Computer Science

Aug 2023 - Dec 2026

Minor in Technology Entrepreneurship; GPA: 3.8

Relevant Coursework: Data Structures & Algorithms, Software Development Essentials, Computer Systems & Organization, Discrete Mathematics and Theory, Cybersecurity, Human-Computer Interaction, F1 Tenth Autonomous Racing

Organizations: Zeta Tau Alpha (Philanthropy Director), Women in Computing Sciences, Girls Who Code, Smart Women Securities, Data Science and Analytics, Club Flag Football

TECHNICAL SKILLS

Languages: Python, Java, JavaScript/TypeScript, C++, SQL, HTML, CSS, R, XML

Frameworks and Tools: React, Node.js, Git, Tailwind, MongoDB, Streamlit, Vercel, ROS

Cloud & Infrastructure: AWS, Docker, Kubernetes

Certifications: AWS Certified Cloud Practitioner

EXPERIENCE

Techathon

May 2025 - Aug 2025

Software Engineering Intern

Leesburg, Virginia

- **Developed and deployed HubZoneCareers.com**, a full-stack job-matching platform utilizing Java, Spring Boot, PostgreSQL, and AWS (EC2, S3, Lambda, Route 53), enabling **scalable cloud performance** and **onboarding of 150+ users**.
- **Engineered and optimized RESTful APIs** with efficient query handling and caching, reducing latency by 60% and **enabling real-time job filtering** across 100+ listings for a seamless user experience.
- Improved **AWS security architecture** by auditing **IAM** roles, eliminating excessive privileges, and implementing **policy-based access enforcement**, ensuring a secure and standards-aligned backend environment across AWS services.

SmartComplAI

May 2025 - July 2025

Software Engineering Intern

Remote

- **Validated and analyzed 10+ product features** by designing a comprehensive **Gap Analysis Matrix (30+ findings)** that informed MVP architecture decisions and shaped the feature roadmap for client compliance tools.
- **Engineered core platform modules** including **search, authentication, user portals, and workflow automation**, enabling **real-time production monitoring** and significantly enhancing system reliability and user experience.
- **Developed and deployed a full-stack CMS platform** using **React, Node.js, and MongoDB**, streamlining **content operations** and empowering non-technical teams to independently manage and update production pages.

University of Virginia

Jan 2025 - Present

Research Intern

Charlottesville, Virginia

- Intern Project (April 2025): **Discovered eco-friendly glamping site locations** by analyzing uninhabited islands in **Google Earth Engine**; combined vegetation, water masking, elevation, slope, and storm frequency data to rank island suitability.
- **Debugged and extended NASA's SIBBORK forest model**, modifying parameter search drivers and fixing import errors to run **large-scale simulations** with new constraints, enabling calibration against real forest metrics.
- Intern Project (August 2025 - Present): **Developing a Google Earth Engine application** using HSV/NSVDI indices and **Docker** to detect and remediate shadows in aerial imagery, enabling more reliable vegetation and land-use analysis.

PROJECTS

Muscle Imbalance Tracker | Python, Streamlit, JSON, GitHub

July 2025 – August 2025

- <https://github.com/sruthidacherla/fitness-imbalance-app>
- **Built an interactive Streamlit app** with modular functions and **JSON-based authentication** to help users identify and **address muscle imbalances** through guided assessments, personalized exercises, and visual feedback. **Reached 10+ testers** in pilot use, **improving accuracy of self-assessments** and demonstrating how data-driven fitness tools can shorten rehab/training cycles.

Course Review Application | Team Project - Java, JavaFX, FXML, SQLite, GitHub

Spring 2025

- **Developed a full-stack JavaFX Course Review Application** that enabled student login, course search, and review management by **integrating multiple controllers** (LoginController, CourseReviewController, MyReviewsController) with FXML views, session management, and a DatabaseDriver, **resolving cross-scene data handling issues** to ensure seamless navigation and **persistent state** across the application.