

Srujan Ponnappalli

Raleigh, North Carolina, 27607 - US Permanent Resident

📞 919-839-3265 ✉ sponnap2@gmail.com [🌐 linkedin.com/in/srujanponnapalli](https://www.linkedin.com/in/srujanponnapalli) [🐙 github.com/srujanponnapalli](https://github.com/srujanponnapalli)

Education

North Carolina State University

B.S. Computer Science, B.S. Economics, B.S. Applied Mathematics

Minor in Cognitive Science

Raleigh, NC

Expected 2028

Dean's List

South Piedmont Community College

Associate in Arts, Business Administration Certificate

Charlotte, NC

2023-2024

Relevant Coursework

- Data Structures and Algorithms
- Software Development (Java)
- C with Software Tools
- Statistical Programming in R
- Multi-variable Calculus
- Linear Algebra and Matrices
- Discrete Mathematics
- Probability and Statistics
- Computer Systems

Experience

Machine Learning Research Intern

August 2023 – October 2023

University of North Carolina at Charlotte

Charlotte, NC

- Integrated quadruped robot with deep-learning computer vision models for zero-shot object detection.
- Optimized embedded systems for optimized network functions and additional mobile and desktop integration.
- Prepared and presented live demos for local student tours of the computing lab in a team environment.

Tutor, Group Manager

November 2022 – May 2024

Youth Promise

Remote

- Provided mentorship and technical instruction in mathematics and computer science to underprivileged youth.
- Managed and coordinated a team of 10+ tutors, ensuring efficient scheduling and high-quality instruction.
- Developed innovative coding curriculum with minimal assistance, simplifying complex concepts in brief lessons.

Projects

Flood Impact Mapper | *Python, Rasterio, GeoPandas, Folium*

August 2025

- Developed a geospatial analysis project to map the extent of flooding in Asheville, NC, utilizing Synthetic Aperture Radar (SAR) to see through clouds.
- Processed satellite imagery and integrated public data from the USGS to create a highly accurate model of flood extent.
- Leveraged data analytics and visualization techniques to build an interactive, user-friendly map of flood impact.

PackDoption Animal Rescue Management System | *Java, Swing, File I/O, DSA*

May 2025

- Developed a comprehensive desktop application using Java Swing with MVC architecture and custom data structures.
- Designed inheritance hierarchy with abstract subclasses, applied Singleton design pattern, and implemented custom iterator pattern for efficient data traversal.
- Built robust CSV file parser with comprehensive validation for data, records, and appointments, featuring automated data persistence, filtering, and queue-based scheduling with 15+ classes and 1,300+ lines of production code.

Pocket Librarian | *Java, Kotlin, Firebase, Google Books API*

June 2023

- Developed a comprehensive Android mobile application for book discovery and management, featuring barcode scanning, advanced search capabilities, and personalized reading recommendations across 30+ genres.
- Implemented real-time barcode scanning using CodeScanner library, integrated Google Books API for detailed book metadata retrieval, and New York Times API for curated bestseller lists across categories.
- Built local JSON storage for recently scanned books, designed custom RecyclerView adapters for dynamic content display, and created seamless purchase integration with direct retailer links, resulting in 100+ Google Play Store downloads and 3.9-star average rating.

Technical Skills

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

Technologies/Frameworks: Angular, VSCode, Eclipse, Linux, Jenkins, GitHub, JUnit, AWS, Firebase, Azure, Node.js

Certifications: Microsoft Technology Associate in Python; Business Administration Certificate from SPCC

Honors and Activities

Park Scholar: Full merit scholarship awarded on the basis of outstanding accomplishments and potential in scholarship, leadership, service, and character.

University Honors Program

Krispy Kreme Challenge Board: September 2024 - Present; Head of Finance

Packonomics Club: January 2025 - Present; Vice President