Srinivas Vasudevan svasude7@ncsu.edu

Raleigh, NC, 27606 | 9193957599 | linkedin.com/in/srinivas-vasudevan/ | github.com/SrinivasVasudevan | Portfolio Website

Education

North Carolina State University, Raleigh, NC

Master of Computer Science

Aug 2024 - May 2026

Relevant Coursework: Software Engineering, Artificial Intelligence 1, Advanced Robotics, Neural Networks

GPA: 4.0/4.0

SASTRA Deemed University, Thanjavur, India

Bachelor of Technology in Computer Science and Engineering

Jul 2018 - Jul 2022

Relevant Coursework: Design and analysis of algorithm, Object Oriented programming in C++, Parallel and Distributed Systems

Dean's list: Top 10% 2019 - 2020, Top 2% 2018 - 2019

GPA: 9.22/10.0

Skills

Technologies: C++, Python, JavaScript, TypeScript, Java, Rust, Lua, Go, React, Node.js, Flask, Django, HTML, CSS, Git

Databases: NoSQL, SQL, MySQL, MongoDB, PostgreSQL

Frameworks / Libraries: Express, Tailwind, Angular, Vue.js, Next.js, FastAPI, OpenCV, Keras, Pandas, TensorFlow, PyTorch GitHub, Hugging Face, Docker, Vercel, Postman, Nginx, GCP, AWS, Azure, JIRA, Ollama, NeoVim

Work Experience

Grader, Advanced Robotics, North Carolina State University, Raleigh, USA

Jan 2025 - May 2025

- Modeled Triton bots with ROS, contributing to creating schematics for 10 bots deployed in final student projects.
- Designed a workflow with **Linux** shell scripting to cut down the software setup of each bot at Robotics Laboratory by 60%.

Associate Technical Consultant, Salesforce, Inc., Bengaluru, India

Aug 2022 - Jul 2024

- Optimized and extended cloud microservices in Java for managing Credit scores, increasing processing capacity by 90%.
- Spearheaded an Agile Go-Live initiative as a Scrum Master to integrate the Salesforce customer application with a **React Native** app, driving a 20% increase in multi-platform user adoption and enabling offline functionality.
- Engineered a robust database object creation system leveraging **RESTful API** payloads from custom React Native App, improving data processing speed by 50%.
- Optimized **Azure DevOps CI/CD** version control pipeline with a **GIT** script, cutting deployment time by 40% through selective package deployments.
- Automated the creation of 40 Salesforce workflows and metadata files using Go and Regex, reducing manual effort by 67%. Associate Technical Consultant, Intern, **Salesforce**, Inc., *Bengaluru*, *India* Feb 2022 Aug 2022
 - Developed a comprehensive HMI with **ReactJS** for over 50 million Fintech bank customers, streamlining online KYC processes to enhance user experience and ensure 100% regulatory compliance.
- Implemented automated test scripts using Python and JUnit to validate API functionalities, increasing test coverage by 70%. Research Assistant, Intelligent Systems Group, *SASTRA Deemed University, India* Feb 2021 Feb 2022
 - Created novel models using TensorFlow in Python for video anomaly detection, achieving a 94% AUC score on the UCSD Ped 2 dataset.

Projects

Web development | Website Link | GitHub Link: Created a full-stack web application that predicts trajectories of weather balloons using **React** frontend, Flask Backend, SQLite Database, and Nginx reverse proxy server that handles traffic to an AWS EC2 instance.

Web development | <u>GitHub Link</u>: Designed and implemented a scalable, full-stack recipe application (React, FastAPI, MongoDB); included a Groq-integrated AI assistant with Retrieval-Augmented Generation, resulting in a more user-friendly platform.

Computer Vision (AI/ML) | <u>GitHub Link</u>: Enhanced text clarity in live video using OpenCV and YOLO in Python; integrated solution into Android video streaming app for **Google Solution Challenge 2021** competition.

Publications

Computer Vision

- "Object-centric and memory-guided network-based normality modeling for video anomaly detection", SIVP: Boosted model performance by 50% and AUC scores by 1%.
- "Residual Spatiotemporal Autoencoder with Skip Connected and Memory Guided Network for Detecting Video Anomalies", NPL: Enhanced AUC by 3% on LV dataset via spatio-temporal autoencoder fusion.

Extracurricular

Interests: Soccer, Weight training, Video games.