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: Data structures and Algorithms, 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, Bash, Lua, React.js, Node.js, Flask, Django, HTML, CSS, Git

Databases: NoSQL, SQL, MySQL, SQLServer, MongoDB, PostgreSQL

Frameworks / Libraries: Express, Tailwind, Angular, Vue.js, NextJS, FastAPI, OpenCV, Keras, Pandas, TensorFlow, PyTorch Tools: GitHub, Figma, OpenAI API, Docker, Vercel, Postman, Nginx, GCP, AWS, Microsoft Azure, Ollama

## 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 backend 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** JSON 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 web portal with **ReactJS** for over 50 million Fintech bank customers, streamlining online KYC processes to enhance user experience and ensure 100% regulatory compliance.
  - Automated unit 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 (RAG), 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.