Prashanth Sreenivasan

Brooklyn, NY / prashanthsrn11@gmail.com /+1 6465795028 / Portfolio / Linkedin / Github

Education

New York University, M.S., Computer Science — Sep 2025 – May 2027

Coursework: Machine Learning, Software Engineering, Computer Networks (1st semester)

Birla Institute Of Technology and Science, B.E., Computer Science — Aug 2018 – July 2022

Coursework: Artificial Intelligence, Algorithms, Data Structures, Operating Systems, Principles of Programming Languages, Databases, OOP, Theory of Computation, Discrete Structures, Logic in Computer Science, Linear Algebra, Probability & Statistics, Cognitive Neuroscience, Information Retrieval.

Work Experience

Founding Member, AI and Data Engineer, ImpactCraft, Pune India — Nov 2024 – Aug 2025

- Built a **digital twin** system modeling 500 customers across 3 enterprise clients, integrating **5 health pillars** (adoption, business impact, product performance, stakeholder health, service requests) to deliver a 360° view and **accelerated issue detection**.
- Architected a **multi-agent query framework** (**LangGraph** + **LangChain**) that cut Customer Success Manager prep time by up to 80% through instant, cohesive account insights.
- Spearheaded redesign of **multi-agent orchestration system** by migrating from a static single-agent flow to **LangGraph StateGraph** architecture, enabling parallel, dependency-aware workflows and boosting query **efficiency by 30%.**
- **Automated root-cause analysis** of "red" health pillars by developing a **problem-solving system** with a risk-hypothesis generator and guidance-tree agent, reducing manual investigation time.
- Led the **intelligence module team** (2 engineers + 2 interns), driving architecture, scoping projects, and mentoring in applied GenAI and multi-agent frameworks.

Software Engineer, Zynga, Bangalore India — July 2022 – July 2024

- Worked as **full stack Unity developer** on Zynga's **FarmVille 3**, a farm simulation game with millions of users.
- Developed **three full-stack mini-games** with complete UI/UX design, backend integration, and analytics tracking; one mini-game improved daily active users by **5%.**
- Optimized existing weekly **Leaderboard system** to match players according to previous performances.
- Optimized a **Fishing Minigame**, adding **Dynamic difficulty adjustment** (DDA) to improve player engagement.

Software Engineer Intern, LetsTransport, Remote — Jan 2022 – June 2022

- Set up Jenkins on GCP and Kubernetes for automated CI/CD pipeline, and container management with Docker.
- Migrated data from MongoDB to PostgreSQL using TypeScript, optimizing transaction performance

Machine Learning Intern, AlgoAnalytics, Remote — Apr 2021 – Aug 2021

- Developed LLM-powered system to analyze web news and build **knowledge graphs** of companies using **GPT-neo**, improving classification accuracy from **40% to 85%.**
- Built end-to-end pipeline with **MongoDB**, **Airflow**, and **BeautifulSoup** for automated news crawling and processing.

Software Engineering Intern, Plastic Water Labs — May 2020 – Jun 2020

- Worked with Unity and Vuforia to develop an AR catalog that resembles the IKEA app.
- Implemented a feature allowing users to place models of furniture and home decor in their rooms using the app

Research Publication

Computing Midcurve with Multi-layer and Convolutional Neural Networks - Under Dr. Yogesh Kulkarni. Github

- Published in IEEE International Conference (**ICCCIT-2025**) and IEEE Xplore journal. (Read)
- Developed **CNN architecture** with skip connections and batch normalization for extracting mid curves from 2D shapes, achieving **10x** loss reduction.

Projects

Monocular Depth Estimation. Github

- Implemented a **depth estimation** program with **GLPN** to generate detailed depth maps from single RGB images.
- Implemented experimental pipeline that converted depth maps to **3D point clouds** using **Open3D.**

  Tools Used: PyTorch, Hugging Face Transformers, Open3D, Matplotlib, PIL.

Histogram Equalization. Github

- Implemented Histogram Equalization using Halide for optimized parallel processing.
- Implemented pipeline that supports both RGB and grey scale images

  Tools Used: Halide, C++.

Ask Yogasutra. Github

- Built a web app using **Streamlit Agraph** and **NetworkX** to visualize ancient interconnected verses.
- Implemented **graph-based RAG** chatbot with **Llama-index** for contextual discussions of Yogasutras.

  Tools Used: Streamlit, LlamaIndex, Huggingface.

Interior Design Generator Webpage

- Developed an interior design generator by training **LoRAs** for specific rooms and styles in **Kohya SS.**
- Created a **ComfyUI workflow** that generates rooms in different styles using the trained LoRAs.

  Tools Used: Kohya SS, ComfyUI.

Path Predicting Enemy in Top Down RPG Game. Github

- Developed a top-down RPG, where the player has to escape an enemy and collect coins on the screen.
- The enemy **learns from the players movements** and **predicts the next actions**, creating a challenging chase.

  Tools Used: C#, Unity.

Technologies

Languages:	Python, C#, C++, SQL, Java, TypeScript, JavaScript, LaTeX
ML/AI:	PyTorch, TensorFlow, Keras, LangChain, LangGraph, CrewAI, LLaMA Index, Stable Diffusion, ComfyUI
Tools & Platforms:	Unity, AWS, Docker, MongoDB, Kubernetes, Django, Airflow, Jenkins
Libraries:	NumPy, Pandas, Open3D, NetworkX, RDFLib, Matplotlib, OpenCV

Courses & Certifications

AI and Data Science Program, IIT Roorkee [May 24 - May 25]: 52-week certification in AI, ML, Deep Learning, and Generative AI with real-world projects.

Generative AI Mastery Cohort, 100x Engineers [May 24 - Oct 24]: 22-week cohort program run by industry experts exposing latest trends, tools and concepts in Generative AI with several industry focused projects. Program covered Stable Diffusion, LLM applications, and multi-agent frameworks.

Principles of Computer Vision, Columbia University: Pursuing this comprehensive course covering the theoretical fundamentals of Camera and Imaging, Features and Boundaries, 3D reconstruction from single and multiple viewports and Visual Perception.

Hobbies and personal interests

Running: Running has become a part of my daily life. I have run 12 half marathons, with my personal best being just under 2 hours, and one full marathon. Always up for the next big run.

Painting: I like to paint whenever I get a chance and have an idea I want to see on paper. Charcoal, acrylics, oil, and water paints bring my ideas to life.

Tennis: Playing tennis is usually the first thing I do after waking up. It's one of my favorite ways to stay active.

Reference links

Personal Links

- Personal Website: https://prashanthsrn.github.io/blog/
- LinkedIn Profile: https://linkedin.com/in/prashanth-sreenivasan-03a5b8171
- GitHub Profile: https://github.com/Prashanthsrn

Project Repositories

- MidCurve Neural Network: https://github.com/yogeshhk/MidcurveNN
- Research Paper: https://github.com/Prashanthsrn/MidcurveNN-paper/blob/main/P655-R2.pdf
- Depth Estimation: https://github.com/Prashanthsrn/DepthEstimation
- Histogram Equalization: https://github.com/Prashanthsrn/halide_projects/tree/main/halide_histogram
- Ask Yogasutra: https://github.com/yogeshhk/Sarvadnya/tree/master/src/ask_yogasutra
- Interior Design Generator: https://prashanthsrn.github.io/blog/portfolio/Interior/
- Chase and Escape Game: https://github.com/Prashanthsrn/Chase-and-Escape