Aryan Prodduturi

Software Developer

EDUCATION

Georgia Institute of Technology, Atlanta — BSCS, 2026
- Concentrations: Theory and Modeling & Simulation
- Relevant Coursework: Algorithms, Data Structures, Systems & Networks, Probability & Statistics
- GPA: 3.6

EXPERIENCE

Fullstack Developer, Sri Radha's Veg Cuisine — **2025**
- Designed and built a **centralized digital menu** display system, enabling real-time content updates.
- Developed food waste tracking and forecasting tools to analyze consumption patterns.
- Implemented a **SQL-backed** management system to track daily menus, items, and food wastage data.
- Owned **end-to-end development**, including database design, API integration, UI/UX design, and deployment.

Website Manager, Arkaya Yoga Studio — **2025**
- Led website updates following a brand re-launch, improving **SEO** structure, page performance, and user experience.
- Automated blog publishing and marketing workflows on WordPress and custom scripts to streamline content updates.
- Built an online **appointment scheduling system** that reduced manual work and improved booking efficiency.
- Collaborated with business stakeholders to translate operational needs into technical solutions.

High School Math Teacher, Khan Lab School — **2024**
- Designed and taught an accredited, project-based geometry course aligned with state and institutional standards.
- Applied mastery-based assessment techniques to track student progress and ensure conceptual understanding.
- Achieved a 100% A-grade completion rate while maintaining rigorous academic expectations.

Programming Intern, Big Data Trunk — **2021**
- Developed a Python-based data analysis toolkit to automatically generate key metrics and visualizations from datasets.
- Improved data processing efficiency by standardizing analysis workflows and reusable components.
- Collaborated with a distributed engineering team using Agile/SCRUM methodologies.
- Built reusable Python modules for data ingestion, transformation, and visualization.

PROJECTS

Bayesian NBA Player Projection Model (Python)
- Built a two-stage forecasting pipeline that predicts players stats conditioned on predicted playing time.
- Implemented Bayesian hierarchical regression with partial pooling across opponents and game contexts to generate probabilistic forecasts under sparse data.
- Designed a walk-forward backtesting framework and evaluated out-of-sample performance via forward testing.

Restaurant Waste Management System (JS, Svelte, SQL)
- Developed a waste tracking system that records daily prepared and leftover quantities for individual buffet items.
- Designed and implemented a structured data pipeline for collecting, storing, and querying waste and preparation data.
- Generated analytical summaries to identify trends and inefficiencies in food production.

Options Trading Blog (JS, Svelte)
- Built full-stack web app with SvelteKit + custom APIs for posting trading logs and analysis.
- Implemented a content-driven system enabling scalable post management and dynamically updating pages.

Intro to Computer Science Course
- Independently constructed an introductory level computer science course for 11th and 12th graders at a High School
- Accredited the course in the A-G requirements meaning students received college transfer credits
- Used Mastery Based Learning and Project Based Learning to teach a practically applicable course

Quantitative Trading Algorithm (Javascript)
- Implemented indicator calculations and strategy backtesting using live market APIs.
- Achieved 15% ROI over 6 months in forward testing on daily timeframes.

Text-Based Physics Simulator (C++, Shell Script)
- Implemented a C++ physics engine supporting projectile and rotational dynamics.
- Built interactive terminal visualizations using ncurses.

SKILLS

- **Languages:** Python, JavaScript, C/C++, Java, R, Lua, Swift, Shell
- **Frameworks & Tools:** Svelte/SvelteKit, SQL, Git, REST APIs
- **Other:** Adobe Photoshop, Adobe Illustrator, Spreadsheet Modeling