

Shrikanth A. Seshadri

1405 Casteel Lake Lane, Buford, GA 30518 | 860-975-5410 | rangarajanshrikar@gmail.com | US Citizen

Accolades: International Top 10 @ Google Student Developer Challenge, 3x Hackathon Winner

Education

Georgia Institute of Technology | Atlanta, GA Expected Graduation, May 2027
Bachelor of Science in Computer Science, GPA: 4.0
Relevant Coursework: Algorithmic Design, Computer Systems & Networks, Machine Learning, Linear Algebra

Experience

- Software Engineer Intern, The Home Depot** Aug. – Dec. 2025
- Constructed **5M-node** and **20M-edge** weighted product graph, trained **Graph Neural Network** for product-bundling **recommendations** on HomeDepot.com. Enriched vertices using **text embeddings**.
 - Deployed model as **agent** via **Google ADK**; used by **200+** analysts, impacts **45M** monthly customers.
- Software Engineer Intern, MathWorks** May – Aug. 2025
- Developed automated test classification pipeline using **16-heuristic weighted decision tree**. Tagged low-value files for deletion/refactoring. **Reduced test costs by 30%** and manual refactoring time by **60%**.
 - Refined model with Quality Engineering feedback, achieving **95% prioritization accuracy**.
- Software Engineer Intern, The Home Depot** Jan. – May 2025
- Built graph-based **collaborative filtering** algorithm using **BigQuery** features. Deployed as **Vertex AI REST API endpoint** (<100ms latency) to power online product **recommendation engine**. Serving **2B+** annual visits.
 - Prototyped Chrome extension to demonstrate **4x speedup** and **50% cost reduction** compared to legacy systems. **Cut storage an additional 50%** by flattening graph structure into **Redis** NoSQL tables.
- Software Engineer Intern, The Home Depot** Aug. – Dec. 2024
- Optimized **SQL** bay reserving prediction; **doubled** accuracy. Trained SARIMAX, DeepAR LSTM models for sales forecasting using **BigQuery** for feature engineering. Boosted prediction **accuracy by 400%**.
 - Deployed DeepAR model on **Vertex AI**; **reduced costs by 30%, increased sales 15%** in A/B tested stores.
- Software Engineer Intern, MFactor Consultancy Services** May – Aug. 2024
- Curated **20-page** comparative report on **8** dashboard frameworks and **4** open-source libraries. Evaluated via **7-factor** grading schema; **saved** frontend team **10+ hours** of experimental evaluation.
 - Built responsive React/D3.js signal visualization dashboard; integrated **AWS S3, PostgreSQL, Cognito** (JWT Authentication), deployed onto S3 using **Amazon Amplify**. **Supports 100+ customers**.
 - Built real-time business intelligence dashboard for admin; saved **20 hours/week** in sales workflow.

Leadership

- Cofounder, VigilTech Inc.** Jan. 2024 – May 2025
- Developed AI-powered **police bodycam analysis** platform to **auto-draft** incident **reports**. **Reduced report generation time 90%, improved accuracy 12%**. Demoed to police stations across the U.S.
 - Raised **\$150K** in pre-seed **funding** led by Fusen World Ventures.

Projects

- Therapute | International Top 10, Google Student Developer Challenge** Jan. 2024 – Present
- Built real-time **pose correction** application using **MERN** stack and **MediaPipe**; extracted **24 keypoints**, deployed **Dynamic Time Warping** + vector analysis on **Cloud Run**. <2 sec feedback across **20+ sessions**.
 - Improved** pose-matching accuracy by **30%** over baseline using **Neural Radiance Fields (NeRF)** to tailor correction to user body type.
 - Designed **therapist dashboard** to review **Gemini** LLM-generated exercise summaries, assess patient videos, leave feedback, and assign personalized exercises **between sessions** using captured metrics.

Skills

Programming Languages: Python (NumPy, Pandas, TensorFlow, PyTorch), Java, JavaScript, C++, HTML/CSS, SQL, React.js

Tools & Frameworks: GCP, AWS, Azure, React Native, Node.js, Bash, .NET, GitHub, Firebase, MongoDB, PostgreSQL

Software: Grafana, Tableau, WordPress + Elementor, Canva, Figma, ArcGIS, Microsoft Office, Google Workspace