Shrikar A. Seshadri

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Accolades: International Top 10 @ 2024 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, MathWorks   *May – Aug. 2025*
- Optimized Computational Finance testbed with **weighted decision trees** to **reduce test costs** by **30%**.
- Analyzed feature distributions using violin and KDE plots to guide normalization and feature selection.
- Iteratively refined and validated model based on feedback from Quality Engineering team.

Software Engineer Intern, The Home Depot   *Jan. – May 2025*
- Built graph-based **collaborative filtering** algorithm to power HomeDepot.com **recommendation engine**.
- Prototyped Chrome extension to demonstrate comparative **gains** over legacy recommendation systems.
- **Cut** storage by **50%** by **flattening** graph structure into **Redis**-based NoSQL tables.

Software Engineer Intern, The Home Depot   *Aug. – Dec. 2024*
- Optimized Next Bay Cloud SQL selection logic; **doubled** accuracy, statistically validated forecast workflows.
- Trained ARIMA, SARIMAX, and DeepAR models for sales forecasts using BigQuery for feature engineering.
- Deployed DeepAR LSTM model on Vertex AI. Boosted prediction **accuracy** by **400%**, **reduced** costs by **30%**.

Software Engineer Intern, MFactor Consultancy Services   *May – Aug. 2024*
- Curated **20-page** comparative report on **8** dashboard frameworks and **4** open-source libraries.
  Designed **7-factor** grading schema, produced detailed strength + weakness analysis.
- Built responsive React signal visualization dashboard with D3.js; integrated S3, PostgreSQL, AWS Cognito
  (JWT Authentication), and deployed web app onto S3 using Amazon Amplify.
- 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 application to analyze police **bodycam footage**, extract context, and
  auto-generate incident **reports** in minutes.
- Demoed product to police stations across the U.S., validating use cases and collecting feedback.
- Raised **$150K** in pre-seed **funding** led by Fusen World Ventures.

Projects

Therapute | International Top 10, Google Student Developer Challenge   *Jan. 2024 – Present*
- Built **MERN app** for real-time **pose correction** during at-home **physical therapy** exercises.
- Leveraged **dynamic time warping** and static vector analysis to compare exercise form; applied
  Neural Radiance fields to tailor pose correction by adapting ideal form to the user's body type.
- Designed **therapist dashboard** to review 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: AWS, GCP, OpenAI, React Native, Node.js, Bash, .NET, GitHub, Firebase, MongoDB, PostgreSQL
Software: Grafana, Tableau, WordPress + Elementor, Canva, Figma, ARCGIS, Microsoft Office and Google Applications
Communication: Craft compelling proposals, emails, reports, & presentations, bridge technical & non-technical teams
Languages: English, Tamil, Hindi, Sanskrit, Telugu