Trisanth Srinivasan

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Experience

Research Intern May 2025 – Present
Northeastern University NEUMove Lab, Remote

- Learning to study and improve human movement, with machine learnign, neuroscience, and biomechanics.

Research Intern Mar 2025 – Present
NYU Tandon School of Engineering, mLab, Remote

- Co-authoring a paper on content filtering in K-12 schools with a focus on privacy.
- Analyzing frameworks and policies to assess privacy risks in educational networks.
- Evaluating data to support policy recommendations.

Founder & Researcher Feb 2025 – Present
Cyrion Labs, Remote

- Co-founded a 501(c)(3) lab for ethical, high-impact ML research (funded by SMU, Google, Beal Bank).
- Developed GANs for data augmentation to improve robustness.
- Used advanced hyperparameter tuning to boost performance.
- Leveraged Docker and distributed GPUs to reduce inference latency by up to 5×.
- Managing 50+ Researchers (with 5+ Acceptances and 6 Pending to Top Conferences and Journals)

Founder & Lead Developer | Part-Time Dec 2024 – Present
Extracurriculars.com, Remote

- Launched a platform connecting high school students with extracurricular opportunities.
- Integrated an AI-powered recommendation system using TensorFlow and PyTorch.
- Deployed a full-stack solution (Next.JS, TypeScript, FastAPI) with Docker.

Lead Developer Nov 2024 – Feb 2025
ScienceFair.io, Remote

- Developed key parts of a high-scale SaaS platform (100k+ users) contributing to a high six-figure acquisition.
- Built an extensible microservices architecture with event-driven design.
- Created an AI-driven support agent and streamlined API integrations.

Founder & Lead Developer Dec 2021 – Aug 2023
Nova, Remote

- Developed an open-source privacy tool suite (VPN, DNS, email, web-proxy) with 850K monthly users.
- Collaborated with cybersecurity experts to integrate encryption and multi-factor authentication.
- Managed a distributed server cluster and led a 10-developer team.

Publications

- **GenECA: A Generalizable Framework for Real-Time Multimodal Embodied Conversational Agents with Emotion-Sensitive Interaction**
  Santosh Patapati, Trisanth Srinivasan
  Presents a framework for multimodal interactions with ECAs. *Demo, Accepted IEEE/CVF CVPR 2025 Demo Track.*

- **WebNav: An Intelligent Agent for Voice-Controlled Web Navigation**
  Trisanth Srinivasan, Santosh Patapati
  Proposes a voice-controlled navigation agent using ReAct-inspired generative AI, outperforming traditional screen readers. *Preprint, arXiv:2503.13843, Pending Publication.*
- **Towards Leveraging Semantic Web Technologies for Automated UI Element Annotation**
  Trisanth Srinivasan
  Introduces methods for automating UI element annotation using semantic web technologies. *Paper, Accepted IEEE ICICT 2025.*
- **VIZ: Virtual & Physical Navigation System for the Visually Impaired**
  Trisanth Srinivasan, Santosh Patapati
  Utilizes generative AI to mimic human behavior for complex digital tasks and physical navigation. *Demo, Accepted IEEE/CVF CVPR 2025 Demo Track.*
- **PhysNav-DG: A Novel Adaptive Framework for Robust VLM-Sensor Fusion in Navigation Applications**
  Trisanth Srinivasan, Santosh Patapati
  A novel framework that integrates classical sensor fusion with the semantic power of vision-language models. *Pending Publication.*

Awards and Honors

- **2025, Third Place, Dallas Regional Science and Engineering Fair** – For "ViZ: Navigation System for the Visually Impaired." $100 Cash Prize.
- **2025, Texas DECA International Qualifier** – Recognized in Financial Services Team Decision Making.
- **2024, 2025, Texas DECA State Qualifier (x2)** – Advanced in Financial Analysis and Food Marketing.
- **2024, College Board AP Scholar with Distinction.**

Notable Projects

Vega: Web-Proxy Detection Framework | Python, JS, Web Tech Aug 2024 – Present

- Developed a framework for detecting proxy circumvention in educational networks.
- Working with dedicated professionals from FriscoISD, Boeing, and CapitalOne
- Integrated JavaScript scanning, service worker analysis, and network monitoring with adaptive caching.

PLVA: Privacy Layer Model for Visual Web Agents | Python, Deep Learning Jan 2025 – Present

- Created an automated framework to detect and obscure privacy threats in web imagery.
- Fine-tuned object detection models (YOLOv8, Faster R-CNN) and designed dynamic masking algorithms.

Education

Emerson High School Aug 2022 – May 2026 (Expected)
Relevant Coursework: Calculus I-II, Computer Science I–III

Collin College Aug 2025 – May 2026 (Expected)
Relevant Coursework: Calculus III / Multivariable Calculus, Differential Equations

Technical Skills

Languages: Python, Typescript, C++, Java, HTML/CSS, Google App Scripts

Frameworks & Libraries: Django, React, NextJS, FastAPI, Flask, PyTorch, TensorFlow

Tools: Git, Docker, Kubernetes, Redis, OpenCV, Numpy, Pandas, Postgres, Supabase, Linux, Jupyter, VS Code