

# Vikram Srinivasan

571-882-3057 | [viksrin@outlook.com](mailto:viksrin@outlook.com)

[vik-srinivasan.github.io/personal-website](https://vik-srinivasan.github.io/personal-website) | [linkedin.com/in/vikram-srin](https://linkedin.com/in/vikram-srin) | [github.com/vik-srinivasan](https://github.com/vik-srinivasan)

## EDUCATION

### Stanford University

Palo Alto, CA

*Master of Science in Computer Science, Concentration in Artificial Intelligence*

*Jan. 2025 - June 2026*

*Bachelor of Science in Symbolic Systems, Concentration in Natural Language*

*Sep. 2021 - Dec. 2025*

## EXPERIENCE

### CoStar Group

Washington, D.C.

*Machine Learning Intern* | *Python, PyTorch, AWS, Streamlit, Databricks, NoSQL*

*June 2025 - Sep. 2025*

- Built and deployed a large-scale computer vision pipeline on AWS for detecting kitchen features in real estate imagery, training and fine-tuning CNN and Vision Transformer (ViT) models in PyTorch to achieve over 90% average precision and 80% average recall on key object classes.
- Applied feature engineering, hyperparameter tuning, and iterative evaluation to improve ranking performance of detected features for downstream search and personalization systems.
- Delivered a real-time, human-in-the-loop validation dashboard in Streamlit, enabling interactive model inspection.

*Software Engineering Intern* | *Python, SQL, TypeScript, PyTorch, AWS, Git*

*June 2024 - Sep. 2024*

- Developed a multimodal search engine for 100K+ condo buildings, integrating text embeddings (NLP) and visual embeddings (CV) to improve retrieval accuracy and personalization.
- Built scalable AWS-based APIs for generating and serving vector representations, leveraging OpenSearch for ranking optimization and distributed query execution.
- Designed a responsive interface for interactive content discovery, enabling seamless exploration of multimodal search results.

### BSE Global (Brooklyn Nets)

Brooklyn, NY

*Data Analytics & Insights Intern* | *Python, MySQL, Tableau*

*June 2023 - Sep 2023*

- Built a Machine Learning model using scikit-learn to classify customer segments, resulting in targeted marketing strategies and improved customer acquisition rates.
- Developed a Natural Language Processing (NLP) algorithm to analyze sentiment in sales rep-customer phone calls, aiming to refine sales strategies and performance.

## PROJECTS

**Geovision: Image Geolocation with ViTs** | [github.com/vik-srinivasan/GeoGuessrCV](https://github.com/vik-srinivasan/GeoGuessrCV) | *Python, PyTorch*

- Fine-tuned ViT-B/16 and ResNet-50 on a 104-class country-level geolocation task using GeoGuessr images, achieving 88.3% Top-5 accuracy, surpassing human baselines by 3-5 $\times$  and outperforming GPT-4o.
- Developed an end-to-end geolocation pipeline with Hugging Face APIs, performing error analysis, class-balancing, and hyperparameter tuning to optimize model performance.

**Context-Aware Voice Dictation for Accessibility** | [github.com/vik-srinivasan/Audio-Feedback](https://github.com/vik-srinivasan/Audio-Feedback) | *Python*

- Developed a Voice Dictation Tool leveraging Named Entity Recognition (NER) and real-time error correction to enhance transcription accuracy for blind and low-vision users.
- Built backend functionality in Python to integrate speech-to-text (using Google Web Speech API) and NER (using Google Gemini API) for proper noun detection and correction.

**Multilingual Narrative Detection with XLM-R** | [github.com/vik-srinivasan/MultiNarDetection](https://github.com/vik-srinivasan/MultiNarDetection) | *Python, PyTorch*

- Developed a multi-task transformer model (XLM-R) to perform concurrent Named Entity Recognition and sentiment analysis for narrative detection in multilingual social media text, focusing on political discourse.

**RepWise** | [github.com/vik-srinivasan/RepWise](https://github.com/vik-srinivasan/RepWise) | *TypeScript, React Native, CSS, Supabase*

- Designed and developed a React Native mobile application that generates personalized workout plans using AI, integrating the Gemini API to tailor workouts based on user preferences, workout history, and fitness goals.
- Developed a backend integration with Supabase to store and retrieve workout history, supporting data validation and relational database management.

## SKILLS

- Technologies:** Python, Java, JavaScript, TypeScript, SQL, PyTorch, React, Next.js, Node.js, Git, Docker, AWS
- Expertise:** ML/Data Science, Natural Language Processing, Computer Vision, Full-Stack/Front-End Development