Srikumar Sastry

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Education

Washington University in St Louis

St Louis, MO, US

PhD Candidate in Imaging Science

Aug 2022 - present

- o GPA: 3.97/4.0
- Coursework: Machine Learning, Theoretical Imaging Science, Large Scale Optimization, Large Language Models
- Advised by Dr. Nathan Jacobs. Focusing on applications of multimodal learning in computer vision, remote sensing and ecology.

University of Twente

Enschede, Netherlands

Aug 2020 - May 2022

MS Geoinformatics

- o GPA: 9.12/10.0 (cum laude)
- o Coursework: Image Analysis, Advanced Image Analysis, Spatio-Temporal Modeling

DA-IICT Gandhinagar, India

BTech Information and Communication Technology

Aug 2016 - May 2020

o GPA: 7.98/10.0 (distinction)

o Coursework: System Software, Software Engineering, Statistical Communication Theory

Publications

- Srikumar Sastry, Subash Khanal, Aayush Dhakal, Adeel Ahmad and Nathan Jacobs. "TaxaBind: A Unified Embedding Space for Ecological Applications." IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) (2025).
- Anindya Sarkar*, Srikumar Sastry*, Aleksis Pirinen, Chongjie Zhang, Nathan Jacobs and Yevgeniy Vorobeychik. "GOMAA-Geo: GOal Modality Agnostic Active Geo-localization." Neural Information Processing Systems (NeurIPS) (2024).
- Subash Khanal, Eric Xing, Srikumar Sastry, Aayush Dhakal, Zhexiao Xiong, Adeel Ahmad and Nathan Jacobs. "PSM: Learning Probabilistic Embeddings for Multi-scale Zero-Shot Soundscape Mapping." ACM Multimedia (2024).
- Srikumar Sastry, Subash Khanal, Aayush Dhakal and Nathan Jacobs. "GeoSynth: Contextually-Aware High-Resolution Satellite Image Synthesis." IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW) (2024): 460-470.
- Aayush Dhakal, Adeel Ahmad, Subash Khanal, Srikumar Sastry and Nathan Jacobs. "Sat2Cap: Mapping Fine-Grained Textual Descriptions from Satellite Images." IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW) (2024): 533-542. (Best Paper Award, Oral Presentation)
- Xin Xing, Zhexiao Xiong, Abby Stylianou, Srikumar Sastry, Liyu Gong and Nathan Jacobs. "Vision-Language Pseudo-Labels for Single-Positive Multi-Label Learning." IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW) (2024): 7799-7808.
- Srikumar Sastry, Subash Khanal, Aayush Dhakal, Di Huang and Nathan Jacobs. "BirdSAT: Cross-View Contrastive Masked Autoencoders for Bird Species Classification and Mapping." IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) (2024): 7121-7130.
- Aayush Dhakal, Subash Khanal, Srikumar Sastry, Adeel Ahmad and Nathan Jacobs. "GeoBind: Binding Text, Image, and Audio through Satellite Images." IEEE International Geoscience and Remote Sensing Symposium (2024): 2729-2733.
- Subash Khanal, Srikumar Sastry, Aayush Dhakal and Nathan Jacobs. "Learning Tri-modal Embeddings for Zero-Shot Soundscape Mapping." British Machine Vision Conference (2023).

Experience

Machine Learning Consultant

ISEAL ☑ — Better Cotton

 $St\ Louis,\ MO$

Dec 2024 - Feb 2025

• Part of the team that was awarded a Request for Proposal (RFP) tender for "Remote Sensing Possibilities in Agriculture and Polygonal Data Generation". [Tender no. 2024-10-FR-IMPACT-RS1].

Machine Learning Researcher

St Louis, MO

IARPA SMART ☑ — Kitware

Aug 2022 - July 2024

• Developed self-supervised learning methods for global-scale change characterization involving multi-sensor and multitemporal satellite images.

Machine Learning Researcher

St Louis, MO

GiSCoR ☑ — UIUC

Oct 2023 - May 2024

 Hosted by Chunyuan Diao, UIUC. Developing a geospatial framework for near-real time crop phenological characterization.

Academic Service

Reviewing

- o CVPR 2025
- o ICML 2025
- o ICLR 2025
- o AISTATS 2025
- NeurIPS 2024 (Outstanding Reviewer, Top 8%)
- ∘ ECCV 2024
- o ISPRS (Vision Language Models for Remote Sensing) 2024
- o CV4EO (WACV) [2024, 2025]

Teaching

- o Center for Environment Undergraduate Research Mentor, Summer [2023, 2024]
- o Graduate Student Instructor, CSE 559A Spring 2023

Memberships

IEEE Geoscience and Remote Sensing Society (GRSS)2021 - PresentInternational Society for Photogrammetry and Remote Sensing (ISPRS)2022 - PresentIEEE Computer Society2025 - Present