Srikumar Sastry

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Education

Washington University in St Louis — **St Louis, MO, US**
PhD Candidate in Imaging Science — *Aug 2022 – present*

- 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**
MS Geoinformatics — *Aug 2020 – May 2022*

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

DA-IICT — **Gandhinagar, India**
BTech Information and Communication Technology — *Aug 2016 – May 2020*

- GPA: 7.98/10.0 (*distinction*)
- **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

Remote Sensing Consultant *St Louis, MO*
ISEAL — *Better Cotton* *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

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

Teaching

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