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

Selected Publications

- **Srikumar Sastry**, Aayush Dhakal, Eric Xing, Subash Khanal and Nathan Jacobs. "Global and Local Entailment Learning for Natural World Imagery." IEEE/CVF International Conference Computer Vision (ICCV) (2025).
- Aayush Dhakal, **Srikumar Sastry**, Subash Khanal, Adeel Ahmad, Eric Xing and Nathan Jacobs. "RANGE: Retrieval Augmented Neural Fields for Multi-Resolution Geo-Embeddings." IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) (2025).
- **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). (**Oral Presentation**)
- 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).
- 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). (**Best Paper Award, Oral Presentation**)
- **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).
- Subash Khanal, **Srikumar Sastry**, Aayush Dhakal and Nathan Jacobs. "Learning Tri-modal Embeddings for Zero-Shot Soundscape Mapping." British Machine Vision Conference (BMVC) (2023).

Experience

PhD Research Intern *Sunnyvale, CA*
Dolby Laboratories *May 2025 – August 2025*

- Working on multimodal contrastive learning for Egocentric videos understanding.

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.

Academic Service

Reviewing

- **Conferences**
  - Neural Information Processing Systems (NeurIPS) [2024 (**Outstanding Reviewer, Top 8%**) , 2025]
  - IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) [2025]
  - International Conference on Machine Learning (ICML) [2025]
  - International Conference on Learning Representations (ICLR) [2025]
  - ACM International Conference on Multimedia (ACM MM) [2025]
  - International Conference on Artificial Intelligence and Statistics (AISTATS) [2025]
  - European Conference on Computer Vision (ECCV) [2024]
- **Journals**
  - Transactions on Machine Learning Research (TMLR) [2025]
  - International Society for Photogrammetry and Remote Sensing (ISPRS) [2024]
- **Workshops**
  - Earthvision, CVPR [2025]
  - CV4EO, WACV [2024, 2025]

Teaching

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

Awards

Outstanding PhD Research (Imaging Science) *2025*
Outstanding Reviewer (NeurIPS) *2024*

Memberships

IEEE Geoscience and Remote Sensing Society (GRSS) *2021 – Present*
International Society for Photogrammetry and Remote Sensing (ISPRS) *2022 – Present*
IEEE Computer Society *2025 – Present*