Srikumar S. Sastry s.sastry@wustl.edu | 314-629-7445 | vishu26.github.io

INTERESTS | computer vision (SSL, Representation Learning), remote sensing, vision and language

EDUCATION

PhD Washington University in St Louis Imaging Science 2022 – Expected 2027

MS University of Twente Geoinformation Science and Earth Observation 2020 - 2022

BTech DA-IICT Information and Communication Technology 2016 - 2020

EXPERIENCE

IARPA SMART | Kitware | ML Research

Aug 2022 - present | St. Louis, MO

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

GiSCoR | ML Research

Oct 2023 - present | St. Louis, MO

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

RESEARCH

Multimodal Vision Research Lab | PhD Candidate

Aug 2022 - Present | Washington University in St. Louis

Advised by Prof. Nathan Jacobs. Focusing on applications of multimodal large language models in computer vision and remote sensing.

Mariana Belgiu Lab | Master Thesis

Apr 2021 - Jul 2022 | University of Twente

Developed bayesian active learning methods for satellite image classification and segmentation.

PUBLICATIONS

GeoSynth: Contextually-Aware High-Resolution Satellite Image Synthesis

Srikumar Sastry, Subash Khanal, Aayush Dhakal, Nathan Jacobs CVPRW, 2024. Press: WUSTL News

Sat2cap: Mapping fine-grained textual descriptions from satellite images

Aayush Dhakal, Adeel Ahmad, Subash Khanal, Srikumar Sastry, Hannah Kerner, Nathan Jacobs CVPRW, 2024.

BirdSAT: Cross-View Contrastive Masked Autoencoders for Bird Species Classification and Mapping

Srikumar Sastry, Subash Khanal, Aayush Dhakal, Di Huang, Nathan Jacobs WACV, 2024. Press: WUSTL News

Learning Tri-modal Embeddings for Zero-Shot Soundscape Mapping

Subash Khanal, Srikumar Sastry, Aayush Dhakal, Nathan Jacobs BMVC, 2023.

Task Agnostic Cost Prediction Module for Semantic Labeling in Active Learning

Srikumar Sastry, Nathan Jacobs, Mariana Belgiu, Raian V Maretto IGARSS, 2023.

HONORS

Cum Laude (University of Twente), ITC Excellence Scholarship, DA-IICT Merit Scholarship

SERVICE

Reviewing: NeurIPS 2024, ECCV 2024, ISPRS (Vision Language Models for Remote Sensing) 2024.

TECHNICAL SKILLS

Experienced | Tensorflow, PyTorch, Python, Google Earth Engine (Code), QGIS, ArcGIS

Familiar | R, Matlab, CloudCompare, Pix4D