Session Program

9–12 Sept 2024

2024 NSF HDR Ecosystem Conference
Harvesting the Data Revolution

Poster Session

University of Illinois at Urbana-Champaign, Illinois Conference Center
111 St Marys Rd, Champaign, IL 61820

Tuesday 10 September

17:30

Poster Session

Session | **Location:** Illinois Conference Center, Herritage Hall

17:35–17:36 **Imageomics: FAIR ML Products for Biological Knowledge Discovery**

Speaker
Elizabeth Campolongo

17:36–17:37 **Incorporating phenotypic similarity into trait description embeddings**

Speaker
Soumyashree Kar

17:37–17:38 **Latent Space Phenotyping for Measuring Complex Evolutionary Traits**

Speaker
Caleb Charpentier

17:38–17:39
Hierarchical Conditioning of Diffusion Models Using Tree-of-Life for Studying Species Evolution

Speaker
Mridul Khurana

17:39–17:40
What Do You See in Common? Learning Hierarchical Prototypes over Tree-of-Life to Discover Evolutionary Traits

Speaker
Harish Babu Manogaran

17:40–17:41 **BioCLIP: A Vision Foundation Model for the Tree of Life**

Speaker
Sam Stevens

17:41–17:42
Education and Outreach in Imageomics: Engaging Communities to Advance Science

Speaker
Diane Boghrat

17:42–17:43
Using Deep Learning to Quantify Phenotypic Similarities in Mimic Butterfly Species using Human, Bird, and Butterfly Acuities

Speaker
Michelle Ramirez

17:43–17:44 **Dynamic Network Classification**

Speaker
Namrata Banerji

17:44–17:45 **Tulane Center for Community-Engaged Artificial Intelligence**

Speaker
Aron Culotta

17:45–17:46 **Understanding of impact of training size on animal re-identification**

Speaker
Ekaterina Nepovinnykh

17:46–17:47
Practical Leadership for Team Science: Experiences from the Imageomics Institute

Speaker
Diane Boghrat

17:47–17:48
VLM4Bio: A Benchmark Dataset to Evaluate Pretrained Vision-Language Models for Trait Discovery from Biological Images

Speaker
Anuj Karpatne

17:48–17:49
What Do You See in Common? Learning Hierarchical Prototypes over Tree-of-Life to Discover Evolutionary Traits

Speaker
Anuj Karpatne

17:49–17:50 **National Data Mine Network**

Speaker
Mark Daniel Ward

17:50–17:51
Fish-Vista: A Multi-Purpose Dataset for Understanding & Identification of Traits from Images

Speaker
Kazi Sajeed Mehrab

17:51–17:52
Low-cost Efficient Wireless Intelligent Sensors (LEWIS) for Engineering Education: Native American Knowledge for Data Science Education

Speaker
Fernando Moreu

17:52–17:53
Facilitating Knowledge Sharing and Discovery: Search Functionality and API Design for the I-GUIDE

Speaker
Yunfan Kang

17:53–17:54
CLV: A Novel Framework for Enhanced Anomaly Detection and Attribution in Multivariate Time Series Data

Speaker
Tolulope Ale

17:54–17:55 **Battling Misinformation through Interdisciplinary Collaboration**

Speaker
Zahra Khanjani

17:55–17:56
CMAD: Advancing Understanding of Anomalous Melt Events over the Antarctic Sea Ice

Speaker
Maloy Kumar Devnath

17:56–17:57 **HDR DSC: The Metropolitan Chicago Data-science Corps (MCDC)**

Speaker
Lizhen Shi

17:57–17:58 **Neural Network Efficiency Evaluation on the AMD Versal AI Engine**

Speaker
Yilin Shen

17:58–17:59
BaboonLand Dataset: Tracking Primates in the Wild and Automating Behaviour Recognition from Drone Videos

Speaker
Maksim Kholiavchenko

17:59–18:00
Assessing Annotation AccAssessing Accuracy in Ice Sheets Using Quantitative Metrics

Speaker
Bayu Tama

18:00–18:01 **Genotype to Phenotype Mapping via Deep Learning**

Speaker
David Carlyn

18:01–18:02
Variance Analysis of Brightness Temperature using High-resolution DYAMOND simulations and CRTM in Digital Twin Systems

Speaker
Chhaya Kulkarni

18:02–18:03 **Predicting Sea ice extent over Antarctica using Patch CNN**

Speaker
Sai Vikas Amaraneni

18:03–18:04
HDR DSC: Collaborative Research: Transforming Data Science Education through a Portable and Sustainable Anthropocentric Data Analytics for Community Enrichment (ADACE) Program

Speaker
Yu Liang

18:04–18:05 **Physics-Informed Sea Ice Thickness Prediction**

Speaker
Akila Sampath

18:05–18:06

Probabilistic Prediction of Material Stability: Integrating Convex Hulls into Active Learning

Speaker
Andrew Novick

18:06–18:07

Cyberinfrastructure for Scientific Data Preservation and Image Similarity Search

Speaker
Joshua Agar

18:35