

MMLS25 Poster Session A

Monday, June 23 12:15-1:45

Xiaoyan Bai (University of Chicago) - Concept Incongruence: An Exploration of Time and Death in Role Playing

Simon Benigeri (Northwestern University) - Characterizing and assessing robust conversational interaction: Amendments in order specification tasks

Tianyu Cao (Purdue University) - A Unified Acceleration Framework for Decentralized Optimization

Rajashree Dahal (University of Illinois Chicago) - Exploring Bias in Clinical Notes using Open-Source Large Language Model

Thang Duong (University of Arizona) - Beyond Task Diversity: Provable Representation Transfer for Sequential Multitask Linear Bandits

Aryan Esmailpour (University of Illinois Chicago) - Improved Approximation Algorithms for Relational Clustering

Sachit Gaudi (Michigan State University) - CoInD: Enabling Logical Compositions in Diffusion Models

Blaine Hoak (University of Wisconsin-Madison) - Err on the Side of Texture: Texture Bias on Real Data

Fatemeh Jafarian Dehkordi (University of Illinois Chicago) - Privacy-Preserving Hierarchical Model-Distributed Inference

So Won Jeong (University of Chicago) - LOBSTUR: A Local Bootstrap Framework for Tuning Unsupervised Representations in Graph Neural Networks

Pascal Jutras (Purdue University) - Consistent Controlled Diffusion Samplers Achieve Single-Step Sampling

Sida Li (University of Chicago) - Prediction-Powered Adaptive Shrinkage Estimation

Tianao Li (Northwestern University) - BayesiaNF: Scalable Posterior Estimation for Bayesian Inverse Imaging

Grant Merz (University of Illinois Urbana-Champaign) - DeepDISC: Instance Segmentation on Astronomical Survey Images and Downstream Applications

Aniket Nuthalapati (University of Minnesota) - Enhancing XAI Interpretation through Reverse Mapping Visualizations

Lucky Onyekwelu-Udoka (Iowa State University) - Environmental Signature Extraction for Forensic Analysis of Audio Recording Using AI/LLM Models

Maria Oros (University of Wisconsin-Madison) - Meta-analytic and economic approaches for evaluation of fungicide impact on alfalfa yield in the North Central United States

Raphael Rossellini (University of Chicago) - Can a calibration metric be both testable and actionable?

Alec Sun (University of Chicago) - Learning with improvements in challenging and natural settings

Muhammad Talha (Michigan State University) - Rivers in Rhythm: Basin Independent Approach of Daily Streamflow Prediction

Anuja Tayal (University of Illinois Chicago) - Conversational Assistants to support Heart Failure Patients: comparing a Neurosymbolic Architecture with ChatGPT

Jake Trauger (University of Michigan) - On Next-Token Prediction in LLMs: How End Goals Determine the Consistency of Decoding Algorithms

Shuaiqi Wang (Carnegie Mellon University) - Inferentially-Private Private Information

Ziqing Wang (Northwestern University) - Post-training Language Models for Lead Optimization

Dennis Wu (Northwestern University) - Towards Understanding Transformers for Time Series Forecasting

Siyang Wu (University of Chicago) - Introspective Growth: Automatically Advancing LLM Expertise in Technology Judgment

Kevin Xu (Case Western Reserve University) - LIT-LVM: Structured Regularization for Interaction Terms in Linear Predictors using Latent Variable Models

Chenghao Yang (University of Chicago) - Grounded Persuasive Language Generation for Automated Marketing

Zhiwei Zhang (University of Wisconsin-Madison) - Carotid Plaque Segmentation with a Foundation Model

Zhenghao Zhao (University of Illinois Chicago) - Distilling long-tailed datasets

MMLS25 Poster Session B

Monday, June 23 5:30-7:30

Shishir Adhikari (University of Illinois Chicago) - Exposure Mapping Function Learning for Peer Effect Estimation

Aarav Agarwal (University of Illinois Urbana-Champaign) - Goal Conditioned Adversarial Reinforcement Learning (GCARL)

Saeed Ahmadnia (University of Illinois Chicago) - Active Few-Shot Learning for Text Classification

Ramin Akbari (Michigan State University) - Oblivator Reveals The Cost of Nonlinear Guardedness in Concept Erasure

John Anderson (Embry-Riddle Aeronautical University) - An Entropy-Based Approach to Clustering

Wei Ao (Michigan State University) - CryptoFace: End-to-End Encrypted Face Recognition

Sepehr Dehdashtian (Michigan State University) - OASIS Uncovers: High-Quality T2I Models, Same Old Stereotypes

Kyle Domico (University of Wisconsin-Madison) - Adversarial Agents: Black-Box Evasion Attacks with Reinforcement Learning

Mahdi Erfanian (University of Illinois Chicago) - Needle: A Generative-AI Powered Database for Answering Complex Natural Language Queries on Multi-modal Data

Seyed Esmaeili (University of Chicago) - Data Auctions for Retrieval Augmented Generation

Ahmed Sayeed Faruk (University of Illinois Chicago) - Leveraging Heterogeneous Spillover in Maximizing Contextual Bandit Rewards

Changyu Gao (University of Wisconsin-Madison) - Optimal Rates for Robust Stochastic Convex Optimization

Anthony Goeckner (Northwestern University) - Graph Neural Network-based Multi-agent Reinforcement Learning for Resilient Distributed Coordination of Multi-Robot Systems

Kodjo Houssou (University of Minnesota) - Physics informed signal reconstruction

Gene Li (Toyota Technological Institute at Chicago) - The Role of Environment Access in Agnostic Reinforcement Learning

Chong Liu (SUNY Albany) - Constrained Multi-objective Bayesian Optimization through Optimistic Constraints Estimation

Jingyang Lyu (University of Wisconsin–Madison) - A statistical theory of overfitting for imbalanced classification

Owen Melia (University of Chicago) - Multi-frequency progressive refinement for learned inverse scattering

Pinaki Mohanty (Purdue University) - Sampling from Flat Modes in Discrete Spaces

Zhenyu Pan (Northwestern University) - MetaSpatial: Reinforcing 3D Spatial Reasoning in VLMs for the Metaverse

Suzanna Parkinson (University of Chicago) - Depth Separation in Learning via Representation Costs

Dhruvit Patel (University of Chicago) - Can Stable Emulators Predict Unseen Emergent Phenomena in Chaotic Systems?

Nana Porter-Honicky (University of Michigan) - Forecasting Gait Kinetics and Kinematics for Biological Joint Impedance Estimation Using Machine Learning

Jay Shen (University of Chicago) - A Physically-Motivated Structural Bias for Molecule Transformers

David Stewart (Wayne State University) - Fourier Neural Operators applied to ultra-relativistic quark-gluon hydrodynamics: modeling, normalization, and super resolution

Xudong Tang (Northwestern University) - Mapping Computational Personality Rights with Generative Speech Tokens, Voice Embeddings, and Human Perception

Elvin Tseng (University of Michigan) - On the Convergence of Riemannian DC Programming

Feiran Wang (Illinois Institute of Technology) - X-Field: A Physically Grounded Representation for 3D X-ray Reconstruction

Chenwei Xu (Northwestern University) - Towards Sparse Video Understanding and Reasoning

Jianyu Xu (Carnegie Mellon University) - Contextual Bandits with Online Arm Generation

MMLS25 Poster Session C

Tuesday, June 24 12:00-1:00

Jafar Abbaszadeh Chekan (University of Illinois Urbana-Champaign) - Fully Adaptive Regret-Guaranteed Algorithm for Control of Linear Quadratic Systems

Ibrahim Al Azher (Northern Illinois University) - Optimizing Performance of Retrieval-Augmented Generation with Adaptive Retrieval, LLM Agents, and Efficient Evaluation Methods in Scientific Article Limitation Section

Haoyue Bai (University of Wisconsin-Madison) - AHA: Human-Assisted Out-of-Distribution Generalization and Detection

Canyu Chen (Northwestern University) - Can Large Language Model Agents Simulate Human Trust Behavior?

Chacha Chen (University of Chicago) - Can Domain Experts Rely on AI Appropriately? A Case Study on AI-Assisted Prostate Cancer MRI Diagnosis

Mohsen Dehghankar (University of Illinois Chicago) - An Efficient Matrix Multiplication Algorithm for Accelerating Inference in Binary and Ternary Neural Networks

Yimeng Dou (University of Wisconsin-Madison) - Geometry Aware Neural Radiance Fields for Freehand Ultrasound Reconstruction

Zhiqi Gao (University of Wisconsin-Madison) - Re-Structuring CLIP's Language Capabilities

Athanasios Glentis (University of Minnesota) - Memory-Efficient LLM Pretraining via Minimalist Optimizer Design

Yuwei Han (University of Illinois Chicago) - COST AWARE UNTARGETED POISONING ATTACK AGAINST GRAPH NEURAL NETWORKS

Md Zahid Hasan (Iowa State University) - RLS3: RL-Based Synthetic Sample Selection to Enhance Spatial Reasoning in Vision-Language Models for Indoor Autonomous Perception

Hu Jerry Yao-Chieh (Northwestern University) - Rethinking Foundation Models as Statistical Brains

Kunyang Li (University of Wisconsin-Madison) - On the Robustness Tradeoff in Fine-Tuning

Manling Li (Northwestern University) - RAGEN: Understanding Self-Evolution in LLM Agents via Multi-Turn Reinforcement Learning

Xindi Lin (University of Wisconsin-Madison) - Efficient estimation of semiparametric spatial point processes with V-fold random thinning

Haokun Liu (University of Chicago) - Hypothesis Generation with Large Language Models

Dang Nguyen (University of Chicago) - On the Effectiveness and Generalization of Race Representations for Debiasing High-Stakes Decisions

Jean-Charles Noiro Ferrand (University of Wisconsin-Madison) - Targeting Alignment: Extracting Safety Classifiers from Aligned LLMs

Kwaku, Ariel, Nathan Ofori-Atta, Azria, Rickert (University of Chicago) - Enhancing Financial Decision-Making: Optimization Approaches to Banking Offer Selection

Hahnemann Ortiz (University of Minnesota) - On-Chain Causal Discovery

Md Ashiqur Rahman (Purdue University) - Group Downsampling with Equivariant Anti-aliasing

Matt Raymond (University of Michigan) - Joint Diffusion Sampling with Positive-Unlabeled Guidance

Jack Sanderson (University of Chicago) - Rethinking LLM Advancement: Compute-Dependent and Independent Paths to Progress

Diptangshu Sen (Georgia Institute of Technology) - Incentivizing Desirable Effort Profiles in Strategic Classification: The Role of Causality and Uncertainty

Justin Wang (University of Chicago) - ShorterBetter: Guiding Reasoning Models to Find Optimal Inference Length for Efficient Reasoning

Yibo Wen (Northwestern University) - AlignAb: Pareto-Optimal Energy Alignment for Designing Nature-Like Antibodies

Shuo Xie (Toyota Technological Institute at Chicago) - Adam Exploits ℓ_∞ -geometry of Loss Landscape via Coordinate-wise Adaptivity

Chenxiao Yang (Toyota Technological Institute at Chicago) - PENCIL: Long Thoughts with Short Memory

Yanze Zhang (University of Illinois Chicago) - Adaptive Deadlock Avoidance for Decentralized Multi-agent Systems via CBF-inspired Risk Measurement

Mahdi Masmoudi (Michigan State University) - ParaFIND: Learning PDE Parameter Fields on Irregular Geometries from Sparse Observations