ANURADHA & VIKAS SINHA
COLLEGE OF ARTIFICIAL INTELLIGENCE
& ADVANCED ANALYTICS

FACULTY RESEARCH EXCHANGE



PROGRAM AGENDA

9:30 - 9:33 AM	Introductions - **Dr. Sharad Sharma**, Associate Dean of Research, CAIAA, UNT
9:33 - 9:40 AM	Welcome - **Dr. Kinshuk, Dean,** College of Artificial Intelligence & Advanced Analytics (CAIAA), UNT
9:40 - 12:00 PM	Faculty Research Presentations - 5 minutes each
12:00 – 1:50PM	Lunch and Networking

PRESENTERS & RESEARCH AREAS | 01–14

01 Gahangir Hossain (9:40 - 9:45 AM)
Professor | Data Science
Artificial Intelligence, Brain and Cognitive Science • Data Visualization and Analytics • Cybersecurity Management • Cognitive System Engineering • Machine Learning and Recommender Systems • Health Informatics and Management

02 Kewei Sha (9:45 - 9:50 AM)
Associate Professor | Data Science
Edge Computing • Physical AI • Explainable AI • AI for Healthcare • Trustworthy AI

03 Tozammel Hossain (9:50 - 9:55 AM)
Assistant Professor | Data Science
Clinical predictive modeling from EHRs • Population health & event forecasting • Medical imaging AI (CNNs, ViTs) • LLMs for trustworthy health information • Single-cell genomics & comp. biology

04 Cliff Whitworth (9:55 - 10:00 AM)
Clinical Assistant Professor | Data Science
Psychophysics • Embodied AI and agents • Fast and slow thinking / causality • Computer music / improvisation

05 Yang Zhang (10:00 - 10:05 AM)
Assistant Professor | Data Science
LLMs and grounded agent memory • Graph learning and recommender systems • Federated and privacy-preserving learning • Robotics and Physical AI

06 Stephen Penn (10:05 - 10:10 AM)
Clinical Assistant Professor | Data Analytics & Statistics
Agentic AI • AI Systems Management • Organizational and Management Theory • Open Systems Theory

07 Yixun Xing (10:10 - 10:15 AM)
Clinical Associate Professor | Data Analytics & Statistics
Biomedical Statistics • AI and Quantitative Modeling in Medicine • Intervention Evaluation and Optimization

08 Kai-Sheng Song (10:15 - 10:20 AM)
Professor | Data Analytics & Statistics
Stochastic Processes, Statistical Learning & Signal Quantization • Interdisciplinary statistical research bridging theoretical stochastic modeling, actuarial mathematics, high-dimensional inference, compositional data analysis, and optimal quantization methods for image, video, and machine learning applications.

09 Jingjing Tong (10:20 - 10:25 AM)
Clinical Assistant Professor | Data Analytics & Statistics
Predictors of cancer severity and screening adherence • Service supply chains and resource allocation • Inland waterway disruption response • Course design and evaluation in engineering technology

10 Thuan Nguyen (10:25 - 10:30 AM)
Clinical Professor | Data Analytics & Statistics
AI Deep learning (Generative AI, Agentic AI, Autonomous AI, and beyond) • Quantum Computing - Artificial Intelligence (Quantum-AI) • Knowledge Science / Knowledge Engineering (closely related to Quantum-AI)

11 Junhyeon Kwon (10:30 - 10:35 AM)
Assistant Professor | Data Analytics & Statistics
Spatio-temporal statistics • Point processes and event dependence • Environmental and ecological applications

12 Richard Appiah (10:35 - 10:40 AM)
Clinical Assistant Professor | Data Analytics & Statistics
Rare events modeling with fuzzy logic. • Machine learning algorithms design. • Ethical AI use in postsecondary education. • Predictive power differential analytics of data dimensions over time. • Innovative Education.

13 Sarah Quintanar (10:40 - 10:45 AM)
Interim Chair & Clinical Associate Professor | Data Analytics & Statistics
Economics & industry analytics • Applied Policy Evaluation • Economic development and economic impact • AI within education and as a tool for information dispersion

14 Henrique Ewbank (10:45 - 10:50 AM)
Clinical Assistant Professor | Data Analytics & Statistics
Decision Making Process • Sustainable Operations Management

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SCAN FOR DETAILS

PRESENTERS & RESEARCH AREAS | 15–28

15 Heejun Kim (10:50 - 10:55 AM)

Associate Professor | Health Informatics

Drug Safety Monitoring • Mental Health Support • Credibility of Health Information

16 Ana D. Cleveland (10:55 - 11:00 AM)

Regents Professor, Sarah Law Kennerly Endowed Professor, & Director, Health Informatics | Information science

Ontology-Guided AI Generation and Reliability Evaluation, LLM-Enabled Data Fusion, AI-Enabled Information Seeking in Disaster Management, Human–AI Knowledge Organization, and Semantic Indexing, Health Informatics Education

17 Haihua Chen (11:00 - 11:05 AM)

Assistant Professor | Data Science

Large language models & multimodal AI • Data quality & data-centric AI • AI for digital libraries & cultural heritage • Science of science & scholarly evaluation • Health & legal informatics

18 Sahara Ali (11:05 - 11:10 AM)

Assistant Professor | Data Science

Geospatial Data Analysis • Causal AI • Scientific Machine Learning • Earth Informatics

19 Mutlu Mete (11:10 - 11:15 AM)

Associate Professor | Information science

AI in medical imaging, dermoscopy, histopathological and fMRI image analysis • Machine learning, EEG and fMRI models for brain disorders • Health informatics, COVID-19 and transplant outcome prediction • Bioinformatics, biological networks and RNA structure

20 Zeynep Orhan (11:15 - 11:20 AM)

Clinical Associate Professor | Data Analytics & Statistics

AI, Machine Learning, NLP • Responsible and Ethical AI • AI in Healthcare & Mental Health • AI Standards, Human–AI Interaction • Data Analytics & Big Data

21 Wael Korani (11:20 - 11:25 AM)

Assistant Professor | Data Science

Electroencephalography (EEG) biomarkers for depression therapy outcome • An objective ADHD severity score from EEG • Alzheimer's and frontotemporal dementia classification from EEG • Seizure prediction from EEG • Explainable, leakage-free deep learning for clinical EEG • Nature-inspired optimization (Mother Tree Optimization)

22 Bishnu Sarker (11:25 - 11:30 AM)

Assistant Professor | Health Informatics

Health Informatics • Computational Biology • Omics data mining • Network Data Science • Artificial Intelligence

23 Levent Bulut (11:30 - 11:35 AM)

Clinical Assistant Professor | Data Analytics & Statistics

Applications of Foundation Models in Finance and Economics

24 Mehmet Orhan (11:35 - 11:40 AM)

Clinical Associate Professor | Data Analytics & Statistics

Time Series Analysis • Simulation • Pre-Trained Deep Learning Models for Forecasting • Economic Impacts of AI Especially on Labor Markets • Value-at-Risk (VaR) Models

25 Pretom Roy Ovi (11:40 - 11:45 AM)

Assistant Professor | Data Science

Privacy Enhanced Machine Learning • Federated Learning • Large Language Modeling • Data Modeling

26 Ting Xiao (11:45 - 11:50 AM)

Associate Professor | Data Science

Artificial Intelligence and Machine Learning • Representation Learning and Vector Embeddings • Multimodal AI and Large Language Models • Graph Neural Networks and Deep Learning • AI for Healthcare, Environmental, and Social Sciences

27 Orhan Erdem (11:50 - 11:55 AM)

Clinical Associate Professor | Data Analytics & Statistics

Deep learning in medical imaging • Wearables • Large language models in financial decision-making • AI reliability and hallucination • Behavioral finance

28 Sharad Sharma (11:55 - 12:00 PM)

Associate Dean of Research & Sinha Endowed Professor | Data Science

Virtual Reality (VR) & Augmented Reality (AR) • Artificial Intelligence (AI) & Software Engineering (SE) • Neuroinformatics & Brain Computer Interface (BCI) • Data Visualization (DV) • Multi-Agent Systems (MAS) • Multi-User Virtual Reality (MUVR) • Mobile Augmented Reality Applications (MARA)

ADVANCING RESEARCH THROUGH COLLABORATION

Thank you to our faculty for sharing their research, expertise, and innovative ideas.
We look forward to fostering new connections and interdisciplinary research opportunities.

CONTINUE THE CONVERSATION • LUNCH & NETWORKING