

# 2024 Completions - Faculty of Information Technology

## **Dr. Mohammad Sadegh Aslanpour**

(Specialisation: Distributed computing systems) (Conferred: 24-Jan-2024)

Serverless Edge Computing: Resource Scheduling Algorithms and Software Systems

## **Dr. Rumpa Dasgupta**

(Specialisation: Computer science) (Conferred: 24-Jan-2024)

Cyber Attacks and Countermeasures in Transactive Energy Market-based Microgrid Systems

## **Dr. Shahid Iqbal**

(Specialisation: Artificial intelligence) (Conferred: 24-Jan-2024)

Effects of Missense Mutations on Proteins and Protein-Protein Interactions "A Machine Learning Perspective"

## **Dr. Joao Otavio Massari Chervinski**

(Specialisation: Distributed computing systems) (Conferred: 24-Jan-2024)

Towards Connected Blockchains: An In-Depth Analysis and Improvement of Cross-Chain Communication Protocols

## **Dr. Thanh Duc Van Nguyen**

(Specialisation: Artificial intelligence) (Conferred: 24-Jan-2024)

Adversarial Regularisation and Knowledge Distillation for Deep Learning Tasks

## **Dr. Vu Tuan Nguyen**

(Specialisation: Computer science) (Conferred: 24-Jan-2024)

Optimal Transport Theory for Domain Adaptation

## **Dr. Hanrui Wang**

(Specialisation: Computer science) (Conferred: 24-Jan-2024)

Diffusion-based Adversarial Purification Protecting Face Authentication Systems from Multi-task Gray-box Attacks

## **Dr. Zeinab Ghaemi**

(Specialisation: Information technology - other) (Conferred: 21-Feb-2024)

Bridging Reality and Data with Situated Maps and Charts

## **Dr. Shaveen Singh**

(Specialisation: Information technology - other) (Conferred: 21-Feb-2024)

Improving Educational Design using Multi-channel Learning Analytics Data

## **Dr. Tuhin Chakraborty**

(Specialisation: Information technology - other) (Conferred: 06-Mar-2024)

Resource Management in Sustainable Cloud Data Centers

## **Dr. Vinky Chow**

(Specialisation: Artificial intelligence) (Conferred: 06-Mar-2024)

Machine Learning Techniques for Photocatalysis and Materials Discovery

## **Dr. Stanislav Pozdniakov**

(Specialisation: Computer science) (Conferred: 06-Mar-2024)

Embedding Data Storytelling into Learning Analytics Interfaces to Enhance Teachers' Classroom Monitoring

**Dr. Alvin Jian Jia Tan**

(Specialisation: Software development) (Conferred: 06-Mar-2024)  
Software Clustering and Refactoring Efforts to aid in Remodularisation

**Dr. Jiawei Wang**

(Specialisation: Computer science, info systems) (Conferred: 06-Mar-2024)  
Static Program Analysis for Python

**Dr. Qian Huang**

(Specialisation: Information systems) (Conferred: 23-Mar-2024)  
Understanding Cloud-based Enterprise System Implementation Challenges in Higher Education Institutions: A Stakeholder Engagement Perspective

**Dr. Ahmed Khan**

(Specialisation: Computer science) (Conferred: 23-Mar-2024)  
Novel Image Watermarking Methods for Simultaneous Improvement of Robustness, Imperceptibility, and Embedding Capacity

**Dr. Xiaoyu Guo**

(Specialisation: Artificial intelligence) (Conferred: 11-Apr-2024)  
Complex Question Answering: from Data to Method

**Dr. Muhammad Ayaz**

(Specialisation: Computer science general) (Conferred: 24-Apr-2024)  
FHIR Intelligent Data Mapping and Analytics Framework

**Dr. Islam Hany Abbas Nassar**

(Specialisation: Artificial intelligence) (Conferred: 24-Apr-2024)  
Deep Visual Recognition with Limited Human Supervision

**Dr. Duy Son Dao**

(Specialisation: Artificial intelligence) (Conferred: 08-May-2024)  
Towards Open-World Vision Applications by Learning Image-Region Representation

**Dr. Alpitiya Arachchige Isuri Narmada Perera**

(Specialisation: Artificial intelligence) (Conferred: 08-May-2024)  
Learning to cooperate in population games with scalable and resilient intrinsic rewards

**Dr. William Thomas Schmidt**

(Specialisation: Artificial intelligence) (Conferred: 08-May-2024)  
Investigating Fidgety Movement detection using consumer-based hardware and Artificial Neural Networks

**Dr. Fengda Zhu**

(Specialisation: Artificial intelligence) (Conferred: 08-May-2024)  
Deep Learning-Powered Embodied Navigation in Simulated Environments

**Dr. Shange Fu**

(Specialisation: Information technology - other) (Conferred: 23-May-2024)  
On the Sustainability of Decentralized Finance

**Dr. Yun Zhao**

(Specialisation: Applied and computational mathematics) (Conferred: 23-May-2024)  
Statistical Machine Learning Methods for Modelling, Imaging, and Monitoring the Brain

**Dr. Sayyida Masoom Gilani**

(Specialisation: Computer science) (Conferred: 05-Jun-2024)

Investigating the Role of a Social Support-Enabled Mobile Health (mHealth) Framework to Alleviate Depressive Symptomatology and Elevate Psychological Well-being in Adolescents

**Dr. Ryan Hechenberger**

(Specialisation: Algorithms) (Conferred: 05-Jun-2024)

Navigating around Obstacles in Euclidean Space with Ray Casting

**Dr. Brandon Boo Guan Khoo**

(Specialisation: Artificial intelligence) (Conferred: 05-Jun-2024)

Detection and Attribution of Synthetically Generated Deepfake Imagery

**Dr. Zhe Chen**

(Specialisation: Artificial intelligence) (Conferred: 20-Jun-2024)

Tackling Realistic Complexities in Multi-Agent Path Finding

**Dr. Emma Megan Whitelock-Wainwright**

(Specialisation: Computer science - other) (Conferred: 03-Jul-2024)

"Making sense of the quantitative by overlaying the qualitative": An exploration into medical practitioner data sensemaking to scaffold clinical performance reflection

**Dr. David Olayemi Alebiosu**

(Specialisation: Information technology - other) (Conferred: 23-Jul-2024)

A Deep Multi-Model Approach for Automatic Tuberculosis Severity Assessment with Computed Tomography Images

**Dr. Ming Jin**

(Specialisation: Computer science) (Conferred: 23-Jul-2024)

Towards Dynamic Graph Neural Networks

**Dr. Chamath Abeysinghe**

(Specialisation: Artificial intelligence) (Conferred: 31-Jul-2024)

Insect Tracking in Highly Crowded and Dynamic Environments

**Dr. Zhixi Cai**

(Specialisation: Artificial intelligence) (Conferred: 31-Jul-2024)

Content-Driven Multimodal Deepfake Generation and Temporal Localization

**Dr. Elliot May Freeman**

(Specialisation: Library/Archival studies) (Conferred: 31-Jul-2024)

"Since this is a naming time": Queer/ing (Re)Description in Institutional Archives

**Dr. Leona May Holloway**

(Specialisation: Information technology - other) (Conferred: 31-Jul-2024)

3D Printing for Access to Graphics by Touch Readers

**Dr. Devi Karolita**

(Specialisation: Software development) (Conferred: 31-Jul-2024)

Investigating Persona Incorporation in Requirements Engineering

**Dr. Shu Yu Tew**

(Specialisation: Mathematical statistics) (Conferred: 31-Jul-2024)  
Bayesian Shrinkage Methods for Linear Regression

**Dr. Munasinghe Arachchige Bhagya Jayashani Rupasinghe**

(Specialisation: Artificial intelligence) (Conferred: 15-Aug-2024)  
Road Pavement Optimal Upgrade Scheduling Accounting for Minimizing Congestion

**Dr. Yun Fen Yong**

(Specialisation: Networks and communications) (Conferred: 15-Aug-2024)  
Enhancing Indoor Localization through Precise Radio Map Construction and Fingerprint Interpolation in Complex and Dynamic Environments

**Dr. He Zhang**

(Specialisation: Computer science) (Conferred: 15-Aug-2024)  
Towards Trustworthy Graph Neural Networks: Robustness, Privacy, and Fairness

**Dr. Samuel Reinders**

(Specialisation: Other information technology general) (Conferred: 28-Aug-2024)  
Creating Multimodal Interactive 3D Printed Models with People who are Blind or have Low Vision

**Dr. Abishek Sriramulu**

(Specialisation: Artificial intelligence) (Conferred: 28-Aug-2024)  
Graph Neural Network based forecasting framework for large scale multivariate time series

**Dr. Wei Tan**

(Specialisation: Artificial intelligence) (Conferred: 28-Aug-2024)  
Improving Data Labelling Efficacy with Deep Neural Network via Active Learning

**Dr. Meriem Tebourbi**

(Specialisation: Information technology - other) (Conferred: 28-Aug-2024)  
Supporting Digital Engagement and Capability Building in Community-Based Organisations

**Dr. Xin Zheng**

(Specialisation: Computer science) (Conferred: 28-Aug-2024)  
Automated Graph Machine Learning Operations (MLOps) Workflow

**Dr. Kassem Bagher**

(Specialisation: Information technology - other) (Conferred: 12-Sep-2024)  
Building Secure and Trustworthy Stream Analytics Systems Using Trusted Execution Environment

**Himanshu Pahuja**

(Specialisation: Decision support systems) (Conferred: 12-Sep-2024)  
Data-driven decision-support system for improving store expansion decisions in retail

**Dr. Ciaran Michael Frame**

(Specialisation: Information technology - other) (Conferred: 25-Sep-2024)  
From listening to playing: reimagining musical participation through technology and collaboration

**Dr. Priscila Grecov**

(Specialisation: Artificial intelligence) (Conferred: 25-Sep-2024)  
Causal Inference with Neural Network Models and Advanced Time Series Forecasting Techniques

**Dr. Lucija Ivšić**

(Specialisation: System development) (Conferred: 25-Sep-2024)

Performance of Identities - Emergence of The Self Through The Practice of Voice and Remembering

**Dr. Jia Wei Koh**

(Specialisation: Artificial intelligence) (Conferred: 25-Sep-2024)

Measuring quality of care in the clinical speciality of urology: revision of evidence and application of novel models for risk adjustment, audit and feedback using big data

**Chun Wai Lau**

(Specialisation: Business systems/System development) (Conferred: 25-Sep-2024)

Blockchain Applications for the Air Cargo Supply Chains

**Dr. Yixin Liu**

(Specialisation: Artificial intelligence) (Conferred: 25-Sep-2024)

Learning Graph Neural Networks with Limited Information

**Dr. Rebecca Jane Fleming**

(Specialisation: Software development) (Conferred: 09-Oct-2024)

Digital Narratives: Design for Motivational Impact in Sign Language Learning

**Dr. Haoyu He**

(Specialisation: Artificial intelligence) (Conferred: 09-Oct-2024)

Towards Efficient Training and Inference of Large Transformer Models

**Dr. Mahamat Moussa Abbas Ali**

(Specialisation: Artificial intelligence) (Conferred: 09-Oct-2024)

Integrated Model for High-Level Egocentric Video Understanding

**Dr. Kevin David Shedlock**

(Specialisation: Computer science, info systems) (Conferred: 09-Oct-2024)

Mapping an Indigenous Procedure for the Construction of an IT Artefact

**Dr. Yidan Zhang**

(Specialisation: Information technology - other) (Conferred: 09-Oct-2024)

Supporting Spatio-temporal Data Sensemaking using Embodiment in Immersive Environments

**Dr. Zizheng Pan**

(Specialisation: Artificial intelligence) (Conferred: 23-Oct-2024)

Efficient Transformers for Visual Recognition

**Dr. Yanjun Shen**

(Specialisation: Security science) (Conferred: 23-Oct-2024)

Privacy-Preserving Data Exchange: Cryptographic Primitives and Solutions

**Yousra Ashfaq**

(Specialisation: Information technology) (Conferred: 06-Nov-2024)

Moving Object Detection in Versatile Video Coding Compressed Domain

**Dr. Yue Liu**

(Specialisation: System development) (Conferred: 06-Nov-2024)

Towards Reliable LLM-based Software Development Tools

**Dr. Han Hu**

(Specialisation: Software development) (Conferred: 04-Dec-2024)  
Towards Automated Cross-platform App GUI Development

**Dr. Braden John Kidd**

(Specialisation: Computer science) (Conferred: 04-Dec-2024)  
Modelling Residential Energy Hub Transactive Energy Markets

**Dr. Yiwen Lu**

(Specialisation: Information technology - other) (Conferred: 04-Dec-2024)  
Non-parametric Variable Selection for Interpretable Classification Models

**Dr. Rakesh Patibanda**

(Specialisation: Computer technology) (Conferred: 04-Dec-2024)  
Body-Actuating Play: Towards Understanding the Design of Play where Users Share Bodily Control with a Computer

**Dr. Qizhou Wang**

(Specialisation: Artificial intelligence) (Conferred: 04-Dec-2024)  
Deep Anomaly Detection on Graphs

**Dr. Aijia Yang**

(Specialisation: Artificial intelligence) (Conferred: 04-Dec-2024)  
Effective Context Mining and its Applications in Object Detection and scRNA-seq Cell Classification

**Dr. Yang Hong**

(Specialisation: Artificial intelligence) (Conferred: 11-Dec-2024)  
Towards Automated Support for Effective Modern Code Review Activities

**Dr. Richard Ikenna Osakwe**

(Specialisation: Artificial intelligence) (Conferred: 11-Dec-2024)  
Towards prescriptive analytics of learning strategies