

Day 1: 13 Nov. 2024 (D502)

8:30 - 9:00 — Registration & welcome coffee

9:00 - 9:30 — Opening remarks

Welcome by the conference chairs and introduction to MobiQuitous 2024.
Tor-Morten Grønli and Ahmet Soylu

9:30 - 10:30 — Keynote 1

"Think Broader, Run Local: Towards Neuro-Symbolic AI at the Edge"

Speaker: Radu Prodan.

10:30 - 11:00 — Coffee break

11:00 - 12:45 — Session 1, chaired by Huamin Ren

- **11:00 - 11:20 — 350861:** A Framework for Devising, Evaluating, and Fine-tuning Indoor Tracking Algorithms
- **11:20 - 11:40 — 350862:** A Preliminary Study on Core Temperature Estimation Using a Neonatal Thermal Model via Backpropagation Algorithm
- **11:40 - 12:00 — 350860:** A Service-based Real-time Anomaly Detection Method for Sensor Stream Data
- **12:00 - 12:20 — 351466:** A Two-Step Deep Neural Network Approach for Real-Time Context-Aware Health Monitoring of Hajj Pilgrims
- **12:20 - 12:40 — 350816:** Resilience Against APTs: A Provenance-based IIoT Dataset for Cybersecurity Research

12:45 - 13:45 — Lunch break (D301)

13:45 - 15:30 — Session 2, chaired by Guru Bhandari

- **13:45 - 14:05 — 348542:** Adaptive Deployment of Application-level Sensing and Data Processing Pipelines in a Wireless Network of Embedded Devices
- **14:05 - 14:25 — 350619:** AI Robust Anomaly Localization for DC Microgrid Using Adversarial Autoencoder
- **14:25 - 14:45 — 350647:** Automatic Marker Placement Method for Marker-based Virtual Reality
- **14:45- 15:05 — 351312:** Wearable-based Fair and Accurate Pain Assessment Using Multi-Attribute Fairness Loss in Convolutional Neural Networks
- **15:05- 15:25 — 349878:** Resource-aware Mixed-precision Quantization for Enhancing Deployability of Transformers for Time-series Forecasting on Embedded FPGAs

15:30 - 16:00 — Coffee break

16:00 - 18:05 — Session 3, chaired by Onur Duman

- **16:00 - 16:20 — 348702:** Deep Generative Domain Adaptation with Temporal Relation Knowledge for Cross-User Activity Recognition

- **16:20 - 16:40 — 350495:** DERGB: An Android malware adversarial attack technique based on RGB images
- **16:40 - 17:00 — 350376:** Scene Graph driven Context Query Generation: A Focus on Diversity and Situation-Specific Queries
- **17:00 - 17:20 — 348721:** Simulating and Evaluating Search Strategies for Highly Accurate Localization based on Wireless Technologies using Autonomous Unmanned Aerial Vehicles
- **17:20 - 17:40 — 350499:** Real-time mobile health analytics & interventions pipeline to detect acute events in COPD
- **17:40 - 18:00 — 348496:** Collection Scheduling with Memory Constraints for Low Earth Orbit Satellite Constellations

19:00 - 21:30 — Gala dinner

Havsmak restaurant, Kirsten Flagstads Plass 1, 0255 Oslo (Oslo Opera House)

Day 2: 14 Nov. 2024 (D502)

9:00 - 10:00 — Keynote 2

"Energy Edge Intelligence"

Speaker: Sabita Maharjan.

10:00 - 10:30 — Coffee break

10:30 - 12:15 — Session 4, chaired by Kjetil Raaen

- **10:30 - 10:50 — 350853:** EEGAmp+: Investigating the Efficacy of Functional Connectivity for Detecting Events in Low Resolution EEG
- **10:50 - 11:10 — 348351:** Environment Independent Fall Detection with WiFi Streams
- **11:10 - 11:30 — 350863:** Establishing a Data-Efficient Witness Protocol for Connected Autonomous Vehicles
- **11:30 - 11:50 — 345554:** Event-driven Performance Evaluation of Statecharts and MicroPython on ESP32-C3 Platforms
- **11:50 - 12:10 — 351350:** Simulating Urban Pedestrian Flows by Fusing Wide-Area Location Data and Spot Pedestrian Counts

12:15 - 13:15 — Lunch break (D601)

13:15 - 15:00 — Session 5, chaired by Guru Bhandari

- **13:15 - 13:35 — 350460:** Exploiting NLOS Links for Opportunistic Routing in Internet of Vehicles: An Energy-Efficient Optimized Approach
- **13:35 - 13:55 — 350218:** Genetic Algorithm Optimization for Mobile Crowd-sensing of On-street Parking
- **13:55 - 14:15 — 350583:** GNN-XAR: A Graph Neural Network for Explainable Activity Recognition in Smart Homes
- **14:15 - 14:35 — 350549:** Smartphone Contact-Object Estimation by Acoustic Sensing Focusing on Abstraction Level

- **14:35 - 14:55 — 350425:** Spatio-Temporal Analysis of Concurrent Networks

15:00 - 15:30 — Coffee break

15:30 - 17:35 — Session 6, chaired by Gebremariam Assres

- **15:30 - 15:50 — 350584:** MDMV: A Malware Detection Method based on Memory and Visualization on KVM
- **15:50 - 16:10 — 350542:** Real-Time Obstacle Detection and Safe Operation for Industrial Autonomous Mobile Robots
- **16:10 - 16:30 — 350279:** Supporting an Ephemeral Shared Dataspace with a BLE connectionless protocol
- **16:30 - 16:50 — 350512:** Verifying Multi-Vendor IoT Deployments using Conditional Tables
- **16:50 - 17:10 — 350600:** CSI Phase Fingerprinting for Indoor Positioning Services using Deep Reinforcement Learning
- **17:10 - 17:30 — 349651:** VF-RL: A Reinforcement Learning-Based Coverage Improvement in Mobile IoT Networks using Virtual Force

17:30— Closing remarks

Wrap-up and future directions for MobiQuitous.