Detailed Program Schedule:

Starting time: 09:20
Opening remarks from the workshop chairs: 09:20 - 09:25

Session I: Environmental Sensing
Keynote 1: 09:25 - 10:10
- Prof. Josaphat Tetuko Sri Sumantyo (Center for Environmental Remote Sensing (CEReS) at Chiba University)

10:12 - 10:30 (EnvSys'24)
- **Seismic Layer Segmentation Models with Channel Attention Block in Carbon Storage Study**
  Isack Farady (National Central University), Chia-Chen Kuo (National Applied Research Laboratories), Sang Le (Yuan Ze University), Chih-Wei Wang (National Applied Research Laboratories), Hui-Fuang Ng (University Tunku Abdul Rahman), Chih-Yang Lin (National Central University), Ming-Jen Wang (National Applied Research Laboratories)

10:15 - 10:30 (NetAISys'24)
- **The Case for Hierarchical Deep Learning Inference at the Network**
  Ghina Al-Atat, Andrea Fresa, Adarsh Prasad Behera (IMDEA Networks Institute); Vishnu Narayanan Moothedath, James Gross (KTH Royal Institute of Technology); Jaya Prakash Champati (IMDEA Networks Institute)

<mark>Coffee Break: 10:30 - 11:00</mark>

Session 2: Edge AI & IoT
11:00 - 11:18 (NetAISys'24)
- **Learn to Update Digital Twins with Incremental Scenarios**
  Mengjie Lee (Northwestern Polytechnical University), Yujiao Hu (Purple Mountain Laboratories), Yining Zhu (Northwestern Polytechnical University), Xiaomao Zhou (Purple Mountain Laboratories), Yue Zhao, Xingshe Zhou (Northwestern Polytechnical University)

11:18 - 11:36 (NetAISys'24)
- **Generating multivariate synthetic time series data for absent sensors from correlated sources**
  Julián Jerónimo Bañuelos (Aalto University, RMIT University), Stephan Sigg (Aalto University), Jiayuan He (RMIT University), Flora Salim (University of New South Wales), and Jose Costa-Requena (Aalto University, Cumucore Oy)

11:36 - 11:54 (EnvSys'24)
- **Enabling Location-aware Operation in Decentralized IoT Communications**
  Matteo Visotto (Politecnico di Milano), Luca Mottola (Politecnico di Milano, RI.SE Computer Science, Uppsala University)

11:54 - 12:12 (NetAISys'24)
- **Advancements in UWB: Paving the Way for Sovereign Data Networks in Healthcare Facilities**
  Khan Reaz (Freie Universität Berlin, PHYSEC GmbH), Thibaud Ardoin (Freie Universität Berlin), Lea Muth (Freie Universität Berlin), Marian Margraf (Fraunhofer Heinrich-Hertz Institut), Gerhard Wunder (Freie Universität Berlin), Mahsa Kholghi (PHYSEC GmbH), Kai Jansen (PHYSEC GmbH), Christian Zenger (PHYSEC GmbH), Julian Schmidt (NC Systems GmbH), Enrico Köppe (NC Systems GmbH), Zoran Utkovski (Fraunhofer Heinrich-Hertz Institut), Igor Bjelakovic (Fraunhofer Heinrich-Hertz Institut) Mathis Schmieder (Fraunhofer Heinrich-Hertz Institut), and Olaf Dressel (Bundesdruckerei GmbH)

12:12 - 12:30 (NetAISys'24)
- **Impact of Joint Heat and Memory Constraints of Mobile Device in Edge-Assisted On-Device Artificial Intelligence**
  Pyeongjun Choi, Jeongsoo Kim, and Jeongho Kwak (DGIST)

<mark>Lunch Break: 12:30 – 14:00</mark>

Session 3: Frameworks and Algorithms
Keynote 2: 14:00 - 14:45
- Chulhong Min (Nokia Bell Labs, Cambridge UK)

14:47 - 15:05 (NetAISys'24)
- **A Transformer-free signal encoding module for efficient networked AI systems**
  Linh Vu, Wern Han Lim, Raphael Phan (Monash University, Malaysia)

15:07 - 15:25 (NetAISys'24)
- **Neural Sum Rate Maximization for AI-Native Wireless Networks: Alternating Direction Method of Multipliers Framework and Algorithm Unrolling**
  Siya Chen (City University of Hong Kong), and Chee Wei Tan (Nanyang Technological University)

<mark>Coffee Break: 15:30 - 16:00</mark>

Session 4: AI-based Sensing and Applications
16:00 - 16:18 (EnvSys'24)
- **Data Efficient Sensing for Daylong Light Exposure Analysis**
  Tushar Routh, Nurani Saoda, Viswajith Govinda Rajan, Bradford Campbell (University of Virginia)

16:20 - 16:38 (EnvSys'24)
- **Towards Designing Self-Powered Biodegradable Sensors For Agricultural Applications**
  Bill Yen, Zerina Kapetanovic (Stanford University)

16:40-16:45 Closing Remarks