

## 9:00-10:30 Cyber-Physical Systems I

**Sai Rohan Harshavardhan Vuppala, Nathan Allen, Srinivas Pinisetty and Partha Roop**

A Formal Approach for Safe Reinforcement Learning: A Rate-Adaptive Pacemaker Case Study

**Florian Kohn, Bernd Finkbeiner, Martin Fränzle and Paul Kröger**

Stream-based Monitoring under Measurement Noise

**Kevin Kai-Chun Chang, Kaifei Xu, Edward Kim, Alberto Sangiovanni-Vincentelli and Sanjit A. Seshia**

Dynamic, Multi-Objective Specification and Falsification of Autonomous CPS

## 10:30-11:00 Coffee Break

## 11:00-12:00 Keynote

**Borzoo Bonakdarpour**

Distributed Runtime Verification with Imperfect Monitors: Challenges and Opportunities

## 12:00-14:00 Lunch

## 9:00-10:30 Cyber-Physical Systems II

**Masaki Waga, Kotaro Matsuoka, Takashi Suwa, Naoki Matsumoto, Ryotaro Banno, Song Bian and Kohei Suenaga**

Oblivious Monitoring for Discrete-Time STL via Fully Homomorphic Encryption

**Vidisha Kudalkar, Navid Hashemi, Shilpa Mukhopadhyay, Swapnil Mallick, Christof Budnik, Parinitha Nagaraja and Jyotirmoy Deshmukh**

Sampling-based and Gradient-based Efficient Scenario Generation

**Tanmay Khandait and Giulia Pedrielli**

HyperPart-X: Probabilistic Guarantees for Parameter Mining of Signal Temporal Logic Formulas in Cyber-Physical Systems

## 15:30-16:00 Coffee Break

## 09:00-10:30 Temporal Logics

**Amrutha Benny, Sandeep Chandran, Rajshekar Kalayappan, Ramchandra Phawade and Piyush Kurur**

faRM-LTL: A Domain-Specific Architecture for Flexible and Accelerated Runtime Monitoring of LTL Properties

**Konstantinos Mamouras**

Efficient Offline Monitoring for Dynamic Metric Temporal Logic

**Lennard Reese, Rafael Castro Gonçalves Silva and Dmitriy Traytel**

TimelyMon: A Streaming Parallel First-Order Monitor

## 10:30-11:00 Coffee Break

## 11:00-12:00 Tool Showcase

## 12:00-14:00 Lunch

## 14:00-15:30 Specification and Visualization

**Manuel Caldeira, Hannes Kallwies, Martin Leucker and Daniel Thoma**

Adding State to Stream Runtime Verification

**Sean Kauffman, Kim Guldstrand Larsen and Martin Zimmermann**

The Complexity of Data-Free Nfer

**Jan Baumeister, Bernd Finkbeiner, Jan Kautenburger and Clara Rubbeck**

RTLolaMo3Vis - A Mobile and Modular Visualization Framework for Online Monitoring

## 15:30-16:00 Coffee Break

## 19:00-22:00 Social Dinner

## 09:00-10:30 Deep Neural Networks

**Frank Yang, Simon Zhan, Yixuan Wang, Huang Chao and Qi Zhu**

Case Study: Runtime Safety Verification of Neural Network Controlled System

**Vahid Hashemi, Jan Kretinsky, Sabine Rieder, Torsten Schön and Jan Vorhoff**

Gaussian-Based and Outside-the-Box Runtime Monitoring Join Forces

**Weicheng He, Changshun Wu and Saddek Bensalem**

Box-based Monitor Approach for Out-of-Distribution Detection in YOLO: An Exploratory Study

## 10:30-11:00 Coffee Break

## 11:00-12:30 Distributed Systems

**Léo Henry, Thierry Jéron, Nicolas Markey and Victor Roussanaly**

Distributed Monitoring of Timed Properties

**Gilde Valeria Rodríguez Jiménez and Armando Castañeda Rojano**

Towards Efficient Runtime Verified Linearizable Algorithms

**Borzoo Bonakdarpour, Anik Montaz, Dejan Ničković and N. Ege Saraç**

Approximate Distributed Monitoring under Partial Synchrony: Balancing Speed and Accuracy

## 12:30-14:00 Lunch

## 14:30-16:00 Coffee Break

*Thank you!*





social dinner



Rumeli Hisar Fortress

fortress gate



lunches



RV24

south square



panorama



Asiyan Museum



bebek gate



funicular



boats



main gate



metro & funicular



honeycomb



Bogaziçi University South Campus