

ApPLIED: Advanced tools, programming languages, and PLatforms for Implementing and Evaluating algorithms for Distributed systems

Held in conjunction with PODC-2021 — a virtual workshop on July 30, 2021

9:00 to 13:20 [Eastern Time Zone](#) (EDT)

15:00 to 19:20 [Central European Summer Time](#) (CEST)

Session 1: **Distributed Consensus: Implementation, Specification, and Verification**

9:00 EDT Opening (Miguel Matos)
15:00 CEST

9:10 EDT **Invited talk:** Virtual Consensus in the Delos Storage **Chair:** Elad Schiller
15:10 CEST System, Mahesh Balakrishnan (Facebook Inc.)

9:50 EDT **Invited talk:** One size does not fit all for formal **Chair:** Annie Liu
15:50 CEST specification and verification of distributed systems,
Murat Demirbas (Amazon Web Services and State
University of New York at Buffalo)

10:30 EDT *Experimental Distributed Systems* **Chair:** Chryssis
16:30 CEST Georgiou

An Executable Specification of Paxos for System
Builders, Rahul Sihag, Robinhood (work was performed
at Stony Brook University)

Implementation and Evaluation of Self-Stabilizing
Emulation of State-Machine Replication with Global
Restart Mechanism, Daniel Karlberg and Daniel Kem
(Chalmers University of Technology)

Implementation and Evaluation of Self-Stabilizing Binary
Consensus, Amanda Sjöo (Chalmers University of
Technology)

11:00 EDT **Break/Chat:** Tools for Distributed Algorithms and **Host:** Annie Liu
17:00 CEST Systems

Session 2: Edge Computing, and Distributed Infrastructure

11:20 EDT **Invited talk:** How to (Not) Build Edge Applications?
17:20 CEST Ahmed Ali-Eldin Hassan (Chalmers University of Technology) **Chair:** Miguel Matos

11:40 EDT **Invited talk:** Experimenting in the Edge to Cloud
17:40 CEST Continuum, Kate Keahey (Argonne National Lab) **Chair:** Chryssis Georgiou

12:20 EDT *Experimental Distributed Systems* **Chair:** Elad Schiller
18:20 CEST

ReFI - Reproducible Fault Injection in Distributed Systems, Daniel Castro (University of Lisbon)

Scalable and Efficient Network Emulation, Sebastião Amaro (University of Lisbon)

Deployment and Empirical Evaluation of CoBFS in the Emulab Network Testbed, Andria Trigeorgi (University of Cyprus)

12:50 EDT **Panel:** Tools for Distributed Algorithms and Systems,
18:50 CEST Mahesh Balakrishnan, Murat Demirbas, Ahmed Hassan, and Kate Keahey **Chair:** Miguel Matos

13:10 EDT Closing (Chryssis Georgiou)
19:10 CEST