callforpaper.org

Netherlands March 30, 2025

CONFERENCE WEBSITE: https://hcds-workshop.github.io/edition/2025/

About the Conference

Co-located with ASPLOS/EuroSys 2025, Rotterdam, Netherlands, March 30, 2025

Workshop Website: https://hcds-workshop.github.io/edition/2025/

Important Dates
- Paper submission deadline: January 20 2025 (AoE)
- Author notification: February 10 2025 (AoE)
- Camera ready submissions: February 15 2025 (AoE)
- Workshop: March 30 2025

Call for Papers
Heterogeneous and Composable Disaggregated Systems (HCDS), provide a system design approach for reducing the imbalance between workloads resource requirements and the static availability of resources in a computing system, while making room for novel distributed system approaches in processes communication and data exchange.The HCDS workshop aims at exploring the novel research ideas around composable disaggregated systems and their integration with

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MAR 30

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operating systems and software runtimes to maximize the benefit perceived from user workloads.

Papers are solicited from the areas, including, but not limited to:

Hardware and Prototyping
- Novel composable systems architectures (e.g., CXL based)
- Composable system prototypes and proof-of-concept
- Interconnect technologies (such as CXL)
- Memory pooling, and memory disaggregation

Modeling and Evaluation
- Heterogeneous Composable Systems simulation
- Characterization of heterogeneous composable systems from the perspective of performance, energy consumption and reliability
- New algorithms and performance models to manage and use HCDS
- Memory pooling, and memory disaggregation

System software and programming models/tools
- Operating system designs to support HCDS, such as memory profiling methods, memory management (e,g, page migration and allocation)
- Control plane software and runtime systems for management of composable systems
- Programming models for heterogeneous composable memory
- Analysis / profiling tools and techniques for composable systems
- Virtualization for composable heterogeneous systems

Applications and Use cases
- Use cases for heterogeneous composable systems, such as (but not limited to) deep-learning inference/training and scientific applications

Submission Instructions
Each manuscript will be evaluated with a double-blind review process. Authors must omit at submission time their names or any information that can disclose their identity. Manuscripts length must be 4-6 pages including figures and tables but excluding references. All manuscripts must use the sigplan ACM conference style. It is also expected that all accepted papers will be presented at the workshop by one of the authors.

The organization committee is working for getting proceedings published in the ACM Digital library. More details to follow soon.

Submit your work here:
https://hotcrp.software.imdea.org/hcds25/paper.php/new

Organizing Committee
- Christian Pinto (IBM Research Europe, Ireland)
- Dong Li (UC Merced, CA, USA)
- Thaleia Dimitra Doudali (IMDEA Software Institute, Spain)
- Christina Giannoula (University of Toronto, Canada)
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