15th ACM SIGOPS Asia-Pacific Workshop on Systems (APSys 2024)

September 4-5, 2024
Kyoto, Japan

https://apsys2024.github.io/

Image credit: Kiyomizu-dera

Call for Participation

Overview

Building on the success of its predecessors, the 15th ACM SIGOPS Asia-Pacific Workshop on Systems (APSys 2024) will continue to be a lively forum for systems researchers and practitioners across the world to meet, interact, and collaborate with their peers from the Asia/Pacific region. APSys 2024 will be held in Kyoto, Japan on September 4-5, 2024.

Fees

ACM Student Member $400.00 Changes to $450.00 after Wednesday, Aug. 21, 2024	Student Non-Member $450.00 Changes to $500.00 after Wednesday, Aug. 21, 2024
ACM Professional Member $450.00 Changes to $500.00 after Wednesday, Aug. 21, 2024	Non-Member $500.00 Changes to $550.00 after Wednesday, Aug. 21, 2024

Organization

General Chair: Takahiro Shinagawa (The University of Tokyo)
LA Chair: Soramichi Akiyama (Ritsumeikan University)
Finance Chair: Takeshi Yoshimura (IBM Research Tokyo)
Sponsor Chair: Takaaki Fukai (AIST)
Publication Chair: Atsushi Koshiba (TU Munich)
Publicity Co-Chairs: Aaron Ding (TU Delft), Dong Du (SJTU), Hajime Tazaki (IIJ Research Laboratory)
PC Co-Chairs: Marco Canini (KAUST), Irene Y. Zhang (MSR)
Poster Chair: Dmitrii Ustiugov (NTU)

Sponsors

Platinum: IBM

Gold: ANT RESEARCH, Western Digital, BlackBerry, QNX, SAKURA internet, TIS INTEC Group, HUAWEI

Bronze: igel, LY, SoftEther VPN, FIXSTARS

Program

Wednesday, September 4th

Session 1: Memory Madness
(1) Virtual Memory Revisited for Tiered Memory
(2) Persistent Memory I/O-Aware Task Placement for Mitigating Resource Contention
(3) Polar: A Managed Runtime with Hotness-Segregated Heap for Far Memory

Session 2: Kernel Kraziness
(4) Chaos: Function Granularity Runtime Address Layout Space Randomization for Kernel Module
(5) Framekernel: A Safe and Efficient Kernel Architecture via Rust-based Intra-kernel Privilege Separation
(6) Developing Process Scheduling Policies in User Space with Common OS Features

Session 3: Migration Mayhem
(7) SmartNIC-enabled Live Migration for Storage Optimized VMs
(8) Designing and Implementing Live Migration Support for Arm-based Confidential VMs
(9) Towards Efficient End-to-End Encryption for Container Checkpointing Systems

Thursday, September 5th

Session 4: Network Netsense
(10) NotNets: Accelerating Microservices by Bypassing the Network
(11) FHA: Flow-level High Availability on Programmable Network Hardware for Cloud Provider
(12) Split gRPC: An Isolation Architecture for RPC Software Stacks

Session 5: AI Antics
(13) Towards a Flexible and High-Fidelity Approach to Distributed DNN Training Emulation
(14) SERAPH: A Performance-Cost Aware Tuner for Training Reinforcement Learning Model on Serverless
(15) BMoss: Reconfigurable hardware accelerator for scalable plagiarism detection

Session 6: Edge and Cloud Capers
(16) Toward an Edge-Friendly Distributed Object Store for Serverless Functions
(17) Hora: High Assurance Periodic Availability Guarantee for Life-Critical Applications on Smartphones
(18) Faster FUSE Filesystems with Efficient Data Transfers

Session 7: Concurrency Chaos
(19) WoundDie: Concurrency Control Protocol with Lightweight Priority Control
(20) ONIONDISK: A Log-Structured Write-Optimal Virtual Block Device