CHERITech'25

CONFERENCE

Manchester, UK

2025

14th November

cheri-alliance.org

CHERI

Poster highlights

Check them out!

Mike EFTIMAKIS
Founding director – CHERI Alliance

Hesham Almatary - University of Cambridge

- CHERI-seL4 secure hypervisor: support for memory-safe VMMs and VMs (Linux and CheriBSD)
- The poster demonstrates the latest CHERI-seL4 progress which aims towards more secure embedded virtualisation environments:
  - CHERI-seL4 configured as a hypervisor
  - CHERI-seL4 enforces strong isolation between VMs
  - Memory-safe CheriBSD and CHERI-Linux VMs running side-by-side on CHERI-seL4
  - Memory-safe VMMs and Microkit run-times
  - Outcome: Memory-safety within VMs, VMMs, and other native seL4 servers and libraries via CHERI, in addition to strong isolation between VMs, VMMs, and other native protection domains via seL4

Konrad Witaszczyk - University of Cambridge

- Code-centered kernel compartmentalization in CheriBSD

Mark Batty – University of Kent

- New! updated Rust compiler for Morello (1.72.1).
- CHERI + Rust = full safety + most unsafe caught on compilation.
- The team will now grow and build a CHERIoT Rust port.

Peter Rugg - University of Cambridge

- RV64Y: CHERI RISC-V standardisation enabling binary compatible FPGA implementations

Yuecheng Wang - University of Cambridge

- CHERI-Muntjac: an efficient, secure, application-class core

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Thank you!

Contact contact@cheri-alliance.org

Web www.cheri-alliance.org

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