Zestawienie konferencji USENIX: https://www.usenix.org/conferences/past

2024

1. Systor 2024, The ACM International Systems and Storage Conference
   Accepted papers:
   https://www.systor.org/2024/accepted-papers/#1630482835121-31ef82a8-bd1f
   Na przykład:
   - TwinPilots: A New Computing Paradigm for GPU-CPU Parallel LLM Inference (best paper)
     https://dl.acm.org/doi/10.1145/3688351.3689164
   - Performance Characterization of SmartNIC NVMe-over-Fabrics Target Offloading
     https://dl.acm.org/doi/10.1145/3688351.3689154
   - Offloading Datacenter Jobs to RISC-V Hardware for Improved Performance and Power Efficiency
     https://dl.acm.org/doi/10.1145/3688351.3689152
   - Can OS Specialization give new life to old carbon in the cloud?
     https://dl.acm.org/doi/10.1145/3688351.3689158 aaa

2. OSDI 2024, 18th USENIX Symposium on Operating Systems Design and Implementation
   List of papers: https://www.usenix.org/conference/osdi24/technical-sessions
   Full proceedings: https://www.usenix.org/system/files/osdi24_full_proceedings.pdf
   Na przykład:
   - Nomad: Non-Exclusive Memory Tiering via Transactional Page Migration
     https://www.usenix.org/conference/osdi24/presentation/xiang
   - Harvesting Memory-bound CPU Stall Cycles in Software with MSH
     https://www.usenix.org/conference/osdi24/presentation/luo
   - DRust: Language-Guided Distributed Shared Memory with Fine Granularity, Full Transparency, and Ultra Efficiency
     https://www.usenix.org/conference/osdi24/presentation/ma-haoran
   - Llumnix: Dynamic Scheduling for Large Language Model Serving
     https://www.usenix.org/conference/osdi24/presentation/sun-biao aa

3. USENIX ATC 2024, 2024 USENIX Annual Technical Conference
   List of papers: https://www.usenix.org/conference/atc24/technical-sessions
   Na przykład:
   - Limitations and Opportunities of Modern Hardware Isolation Mechanisms
     https://www.usenix.org/conference/atc24/presentation/chen-xiangdong
   - ExtMem: Enabling Application-Aware Virtual Memory Management for Data-Intensive Applications
     https://www.usenix.org/conference/atc24/presentation/jalalian
   - PeRF: Preemption-enabled RDMA Framework
     https://www.usenix.org/conference/atc24/presentation/lee
   - An Empirical Study of Rust-for-Linux: The Success, Dissatisfaction, and Compromise
     https://www.usenix.org/conference/atc24/presentation/li-hongyu
   - Scalable and Effective Page-table and TLB management on NUMA Systems
     https://www.usenix.org/conference/atc24/presentation/gao-bin-scalable
   - SuperBench: Improving Cloud AI Infrastructure Reliability with Proactive Validation
     https://www.usenix.org/conference/atc24/presentation/xiong

- StreamCache: Revisiting Page Cache for File Scanning on Fast Storage Devices
  https://www.usenix.org/conference/atc24/presentation/li-zhiyue
- ScalaCache: Scalable User-Space Page Cache Management with Software-Hardware Coordination
  https://www.usenix.org/conference/atc24/presentation/peng
- Every Mapping Counts in Large Amounts: Folio Accounting
  https://www.usenix.org/conference/atc24/presentation/hildenbrand

4. HotStorage 2024, The 16th ACM Workshop on Hot Topics in Storage and File Systems
   https://www.hotstorage.org/2024/
   Accepted papers: https://www.hotstorage.org/2024/accepted.html
   Na przykład:
   - Dictionary Based Cache Line Compression
     https://dl.acm.org/doi/10.1145/3655038.3665941
   - Improving Virtualized I/O Performance by Expanding the Polled I/O Path of Linux
     https://dl.acm.org/doi/10.1145/3655038.3665944
   - Secure Archival is Hard... Really Hard
     https://dl.acm.org/doi/10.1145/3655038.3666093
   - Can Storage Devices be Power Adaptive?
     https://dl.acm.org/doi/10.1145/3655038.3665945
   - Can ZNS SSDs be Better Storage Devices for Persistent Cache?
     https://dl.acm.org/doi/10.1145/3655038.3665946
   - Quantitative Analysis of Storage Requirement for Autonomous Vehicles
     https://dl.acm.org/doi/10.1145/3655038.3665948
   - Asymmetric RAID: Rethinking RAID for SSD Heterogeneity
     https://dl.acm.org/doi/10.1145/3655038.3665952
   - Breaking Barriers: Expanding GPU Memory with Sub-Two Digit Nanosecond Latency CXL Controller
     https://dl.acm.org/doi/10.1145/3655038.3665953 zz
5. FAST 2024, 22nd USENIX Conference on File and Storage Technologies
   https://www.usenix.org/conference/fast24
   Full proceeedings: https://www.usenix.org/system/files/fast24-full_proceedings.pdf
   Na przykład:
   - Lessons Learnt in Trying to Build New Storage Technologies
     https://www.usenix.org/conference/fast24/presentation/rowstron
   - ~~TeRM: Extending RDMA-Attached Memory with SSD~~
     ~~https://www.usenix.org/conference/fast24/presentation/yang-zhe~~
   - Combining Buffered I/O and Direct I/O in Distributed File Systems
     https://www.usenix.org/conference/fast24/presentation/qian
   - Optimizing File Systems on Heterogeneous Memory by Integrating DRAM Cache with Virtual Memory Management
     https://www.usenix.org/conference/fast24/presentation/liu-yubo
   - I/O Passthru: Upstreaming a flexible and efficient I/O Path in Linux
     https://www.usenix.org/conference/fast24/presentation/joshi
   - Storage Systems in the LLM Era
     https://www.usenix.org/conference/fast24/presentation/panel-storage-systemsaaa
6. NSDI 2024, 21st USENIX Symposium on Networked Systems Design and Implementation

Full proceedings: https://www.usenix.org/sites/default/files/nsdi24-full_proceedings.pdf
List of papers: https://www.usenix.org/conference/nsdi24/technical-sessions
Na przykład:

- Horus: Granular In-Network Task Scheduler for Cloud Datacenters
  https://www.usenix.org/conference/nsdi24/presentation/yassini
- DINT: Fast In-Kernel Distributed Transactions with eBPF
  https://www.usenix.org/conference/nsdi24/presentation/zhou-yang
- Netcastle: Network Infrastructure Testing At Scale
  https://www.usenix.org/conference/nsdi24/presentation/sherwood
- SIEVE is Simpler than LRU: an Efficient Turn-Key Eviction Algorithm for Web Caches
  https://www.usenix.org/conference/nsdi24/presentation/zhang-yazhuo
- Load is not what you should balance: Introducing Prequal
  https://www.usenix.org/conference/nsdi24/presentation/wydrowski
- MobileConfig: Remote Configuration Management for Mobile Apps at Hyperscale
  https://www.usenix.org/conference/nsdi24/presentation/guo

7. LPC 2024, Linux Plumbers Conference, https://lpc.events/

2023

8. FAST'23, 21st USENIX Conference on File and Storage Technologies
   https://www.usenix.org/conference/fast23
   https://www.usenix.org/conference/fast23/technical-sessions
   Na przykład:

   - Building and Operating a Pretty Big Storage System (My Adventures in Amazon S3)
     https://www.usenix.org/conference/fast23/presentation/warfield
   - GL-Cache: Group-level learning for efficient and high-performance caching
     https://www.usenix.org/conference/fast23/presentation/yang-juncheng
   - ~~HadaFS: A File System Bridging the Local and Shared Burst Buffer for Exascale Supercomputers~~
     ~~https://www.usenix.org/conference/fast23/presentation/he~~
   - ~~Citron: Distributed Range Lock Management with One-sided RDMA~~
     ~~https://www.usenix.org/conference/fast23/presentation/gao~~
   - NVMeVirt: A Versatile Software-defined Virtual NVMe Device
     https://www.usenix.org/conference/fast23/presentation/kim-sang-hoon
   - Multi-view Feature-based SSD Failure Prediction: What, When, and Why
     https://www.usenix.org/conference/fast23/presentation/zhang
   - Integrated Host-SSD Mapping Table Management for Improving User Experience of Smartphones
     https://www.usenix.org/conference/fast23/presentation/kim-yoona

9. OSDI'23, 17th USENIX Symposium on Operating Systems Design and Implementation
   https://www.usenix.org/conference/osdi23
   https://www.usenix.org/conference/osdi23/technical-sessions
   Na przykład:

   - ~~RON: One-Way Circular Shortest Routing to Achieve Efficient and Bounded-waiting Spinlocks~~
     ~~https://www.usenix.org/conference/osdi23/presentation/lo~~

- ~~Userspace Bypass: Accelerating Syscall-intensive Applications~~
  ~~https://www.usenix.org/conference/osdi23/presentation/zhou-zhe~~
- ~~Honeycomb: Secure and Efficient GPU Executions via Static Validation~~
  ~~https://www.usenix.org/conference/osdi23/presentation/mai~~
- ~~Core slicing: closing the gap between leaky confidential VMs and bare-metal cloud~~
  ~~https://www.usenix.org/conference/osdi23/presentation/zhou-ziqiao~~
- Johnny Cache: the End of DRAM Cache Conflicts (in Tiered Main Memory Systems)
  https://www.usenix.org/conference/osdi23/presentation/lepers
- SMART: A High-Performance Adaptive Radix Tree for Disaggregated Memory
  https://www.usenix.org/conference/osdi23/presentation/luo

10. SYSTOR, 23 The 16th ACM International System and Storage Conference
    https://www.systor.org/2023/
    Na przykład
    - ~~F3: Serving Files Efficiently in Serverless Computing (Best paper)~~
      ~~https://dl.acm.org/doi/10.1145/3579370.3594771~~
    - Elastic RAID: Implementing RAID over SSDs with Built-in Transparent Compression
      https://dl.acm.org/doi/10.1145/3579370.3594773
    - BOOSTER: Rethinking the erase operation of low-latency SSDs to achieve high throughput and less long latency
      https://dl.acm.org/doi/10.1145/3579370.3594774
    - DPFS: DPU-Powered File System Virtualization
      https://dl.acm.org/doi/10.1145/3579370.3594769

11. NSDI'23 20th USENIX Symposium on Networked Systems Design and Implementation
    https://www.usenix.org/conference/nsdi23
    https://www.usenix.org/conference/nsdi23/technical-sessions
    Na przykład:
    - CausalSim: A Causal Framework for Unbiased Trace-Driven Simulation (Best paper)
      https://www.usenix.org/conference/nsdi23/presentation/alomar
    - ~~Empowering Azure Storage with RDMA~~
      ~~https://www.usenix.org/conference/nsdi23/presentation/bai~~

12. HotStorage'23, The 15th ACM Workshop on Hot Topics in Storage and File Systems
    https://www.hotstorage.org/2023/
    Na przykład
    - Do we still need IO schedulers for low-latency disks?
      https://dl.acm.org/doi/10.1145/3599691.3603400
    - When F2FS Meets Compression-Based SSD!
      https://dl.acm.org/doi/10.1145/3599691.3603402
    - Excessive SSD-Internal Parallelism Considered Harmful
      https://dl.acm.org/doi/10.1145/3599691.3603412
    - When Caching Systems Meet Emerging Storage Devices: A Case Study
      https://dl.acm.org/doi/10.1145/3599691.3603413

13. LinuxCon@OSS EU 2023
   https://www.youtube.com/playlist?list=PLbzoR-pLrL6p445pIqTLUIzsceFp_puSy

14. The 2023 Linux Storage, Filesystem, Memory-Management, and BPF Summit
   Na YouTube
   https://www.youtube.com/playlist?list=PLbzoR-pLrL6rlmdpJ3-oMgU_zxc1wAhjS
   i lwn.net
   - https://lwn.net/Articles/932748/, Zoned storage and filesystems
   - https://lwn.net/Articles/931668/, Peer-to-peer DMA
   - itp.

15. Storage Developer Conference (SDC 2023), September 2023
   https://storagedeveloper.org/
   Prezentacje na YouTube (SDC 2023):
   https://www.youtube.com/watch?v=SHR2uIavnbk

16. ACM Symposium on Operating Systems Principles (SOSP 2023), October 2023
   https://sosp2023.mpi-sws.org/

Różne

- Memory deduplication (od Marcina Copika z ETH Zurich)
   Artykuł: https://mcopik.github.io/assets/pdf/2023_bigdata_upm.pdf
   Slajdy: https://mcopik.github.io/assets/pdf/2023_bigdata_upm_slides.pdf

- 'Mind-blowing' IBM chip speeds up AI, https://www.nature.com/articles/d41586-023-03267-0?utm_source=Live+Audience&utm_campaign=2437e496f0-briefing-dy-20231020&utm_medium=email&utm_term=0_b27a691814-2437e496f0-51328812
(trzeba poszukać w sieci jakiegoś sensownego artykułu i najlepiej zrobić przegląd najnowszych architektur wspomaających AI)

- Flame graphs:
https://www.brendangregg.com/flamegraphs.html,
https://queue.acm.org/detail.cfm?id=2927301
https://queue.acm.org/downloads/2016/Gregg4.svg
https://www.youtube.com/watch?v=VMpTU15rIZY
https://www.youtube.com/watch?v=HKQR7wVapgk

- Storage Trends 2024, https://www.youtube.com/watch?v=l8qPrFtY6qE
- Storage trends in 2023 and beyond, https://www.youtube.com/watch?v=QmmVkz5zhgg

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Od Andrzeja Jackowskiego
   - The Fungible DPU A New Category of Microprocessor

What is New in the Linux kernel
https://lwn.net/Kernel/
https://lwn.net/Kernel/Index/ i wyszukać po ostatnim roku (2024)
   - Support for the TSO memory model on Arm CPUs

- [Atomic writes without tears](#)
- [Virtual machine scheduling with BPF](#)
- [Modernizing BPF for the next 10 years](#)
- [Another push for sched_ext](#)
- [What's scheduled for sched_ext](#)
- [Sched_ext at LPC 2024](#)
- [A proposal for shared memory in BPF programs](#)
- [Measuring and improving buffered I/O](#)
- [Supporting larger block sizes in filesystems](#)
- [Memory-management: tiered memory, huge pages, and EROFS](#)
- itp

1. **Prace z Research at Google, Distributed Systems and Parallel Computing**
   https://research.google/research-areas/distributed-systems-and-parallel-computing/
   Zdecydowana większość prac bardzo dobrze pasuje do tematyki seminarium, oczywiście lepsze są te najnowsze, z ostatniego roku.
   Pełna lista publikacji: https://research.google/pubs/?area=distributed-systems-and-parallel-computing