

Zestawienie konferencji USENIX, część z nich jest dopiero w planach, użyteczne są też linki do poprzednich konferencji. warto na nią zaglądać co jakiś czas.

<https://www.usenix.org/conferences>

Nowe propozycje:

- '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 in 2023 and beyond, <https://www.youtube.com/watch?v=QmmVzk5zhgg>

2023

1. 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>

2. 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>

3. 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>

4. 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>

5. 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>
6. LinuxCon@OSS EU 2023
https://www.youtube.com/playlist?list=PLbzoR-pLrL6p445pIqTLUIzsceFp_puSy
 7. The 2023 [Linux Storage, Filesystem, Memory-Management, and BPF Summit](#)
Na YouTube
https://www.youtube.com/playlist?list=PLbzoR-pLrL6rlmdpJ3-oMgU_zxc1wAhjSi
i lwn.net
 - <https://lwn.net/Articles/932748/>, Zoned storage and filesystems
 - <https://lwn.net/Articles/931668/>, Peer-to-peer DMA
 - Itp.
 8. Storage Developer Conference (SDC 2023), September 2023
<https://storagedeveloper.org/>
Prezentacje na YouTube (SDC 2023):
<https://www.youtube.com/watch?v=SHR2uIavnbk>
 9. ACM Symposium on Operating Systems Principles (SOSP 2023), October 2023
<https://sosp2023.mpi-sws.org/>
 10. Linux Plumbers Conference (November 2023)
<https://lpc.events/>
 11. USENIX Conference on File and Storage Technologies (FAST 2024), February 2024
<https://www.usenix.org/conference/fast24>
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2022

1. LinuxCon@OSS EU 2022
https://www.youtube.com/playlist?list=PLbzoR-pLrL6r3opG-M3bShM_ZMUaqReae
2. Linux Plumbers Conference 2022
https://www.youtube.com/playlist?list=PLVsQ_xZBEyN0a9XC70HTwTFR-TsUtSGBY
<https://lpc.events/event/16/timetable/#all.detailed>
<https://lpc.events/event/16/timetable/#all>
YouTube: <https://www.youtube.com/c/LinuxPlumbersConference>, np.
 - ~~Spawing processes faster and easier with io_uring~~, Josh Triplett, Linux Plumbers Conference 2022
https://www.phoronix.com/news/Linux-LPC2022-io_uring_spawn
Introducing io_uring spawn
<https://lwn.net/Articles/908268/>
 - ~~OS Scheduling with Nest: Keeping Tasks Close Together on Warm Cores.~~
<https://lpc.events/event/16/contributions/1198/attachments/983/1909/plumbers.pdf>
<https://hal.inria.fr/hal-03612592/file/paper.pdf>

- Make RCU do less (& later),
<https://lpc.events/event/16/contributions/1204/attachments/985/1937/Make%20RCU%20do%20less%20%28and%20later%29%21%20%281%29.pdf>
<https://lpc.events/event/16/contributions/1204/attachments/985/2006/Make%20RCU%20do%20less%20%28and%20later%29%21%20%282%29.pdf>
<https://lpc.events/event/16/contributions/1204/attachments/985/2008/Make%20RCU%20do%20less%20%28and%20later%29%21%20%283%29.pdf>
- 3. 20th USENIX Conference on File and Storage Technologies, FAST'22**
<https://www.usenix.org/conference/fast22/technical-sessions>, np.
 - ctFS: Replacing File Indexing with Hardware Memory Translation through Contiguous File Allocation for Persistent Memory
<https://www.usenix.org/conference/fast22/presentation/li>
 - Improving the Reliability of Next Generation SSDs using WOM-v Codes,
<https://www.usenix.org/conference/fast22/presentation/jaffer> (best paper)
 - Operational Characteristics of SSDs in Enterprise Storage Systems: A Large-Scale Field Study
<https://www.usenix.org/conference/fast22/presentation/maneas>
 - 4. SYSTOR 2022, The 15th ACM International System and Storage Conference**
<https://www.systor.org/2022/accepted-papers/#1650796603778-f20f35a4-5cbe>, np.
 - Diego Didona - Understanding Modern Storage APIs: A systematic study of libaio, SPDK, and io_uring, <https://www.youtube.com/watch?v=5jKKVdJJqKY>
 - 5. 19th USENIX Symposium on Network Systems Design and Implementation**
<https://www.usenix.org/conference/nsdi22/technical-sessions>, np.
 - ~~Efficient Scheduling Policies for Microsecond-Scale Tasks,~~
<https://www.usenix.org/conference/nsdi22/presentation/meclure>
 - Learning to Communicate Effectively Between Battery-free Devices,
<https://www.usenix.org/conference/nsdi22/presentation/geissdoerfer>
 - 6. EuroSys 2022**
<https://2022.eurosys.org/programme/>,
<https://dl.acm.org/doi/proceedings/10.1145/3492321> (Proceedings), np.
 - Hardening Binaries against More Memory Errors,
<https://dl.acm.org/doi/pdf/10.1145/3492321.3519580>
 - Characterizing the performance of intel optane persistent memory: a close look at its on-DIMM buffering, <https://dl.acm.org/doi/pdf/10.1145/3492321.3519556>
 - KASLR in the age of MicroVMs
 - 7. 16th USENIX Symposium on Operating Systems Design and Implementation, 2022**
http://0b4af6cdc2f0c5998459-c0245c5c937c5dedcca3f1764ecc9b2f.r43.cf2.rackcdn.com/osdi22/osdi22_full_proceedings.pdf, np.
 - TriCache: A User-Transparent Block Cache Enabling High-Performance Out-of-Core Processing with In-Memory Programs, str. 395
 - Tiger: Disk-Adaptive Redundancy Without Placement Restrictions, str. 413
 - zIO: Accelerating IO-Intensive Applications with Transparent Zero-Copy IO, str. 431

- Application-Informed Kernel Synchronization Primitives, str. 667

Różne

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 (2023)

- Bardzo wiele artykułów dotyczy BPF
- The future of memory tiering, <https://lwn.net/Articles/931421/>
- Moving physical pages from user space, <https://lwn.net/Articles/944115/>
- User-space block driver: <https://lwn.net/Articles/903855/> ,
<https://lwn.net/Articles/926118/>
- The extensible scheduler class, <https://lwn.net/Articles/922405/>
- itp

8. 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>