

Legend

Talk's complexity:



Introduction to technology



For practicing engineers



Academic talk

TRACK 1

TRACK 2

TRACK 3

10:30 – 10:45 EN Conference opening
Alexey Fyodorov
 JUG Ru Group
Vitaly Aksenov
 ITMO University

10:45 – 12:00  EN Multithreading in UI application: When some threads are more equal than others
Dmitry Ivanov
 Huawei
 #threading-models #STM
 #event-sourcing #UI
 #asynchronous

 EN Programming language memory models: Problems, solutions, and directions
Anton Podkopaev
 MPI-SWS, JetBrains Research, NRU HSE
 #data-race-freedom
 #out-of-thin-air #weak
 memory models #atomics

 EN Paxos vs Raft: Have we reached consensus on distributed consensus?
Heidi Howard
 University of Cambridge
 #consensus #raft #paxos

12:00 – 13:15  EN CRDTs: The hard parts
Martin Kleppmann
 University of Cambridge
 #peer-to-peer #CRDT

 EN Oak: A scalable off-heap allocated key-value map
Anastasia Braginsky
 Yahoo! Research
 #concurrency #performance
 #real-time #java #BigData

 EN Efficient and reliable microservices
Oleg Anastasyev
 Odnoklassniki
 #reliability #stateful-systems
 #microservices #cassandra

13:15 – 13:30 EN Conference closing
Alexey Fyodorov
 JUG Ru Group

EN Conference closing
Vitaly Aksenov
 ITMO University

EN Conference closing
Vsevolod Brekelov
 JUG Ru Group

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17:00 – 17:15 EN Conference opening
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JUG Ru Group

17:15 – 18:30  EN Safe user-level sharing of memory-mapped resources
Michael Scott
University of Rochester
#concurrency #hodor

 EN Interview and Q&A with Alex Petrov
Alex Petrov
#Cassandra #QnA
#database-internals
#distributed-consensus
#ssd-optimized-storage #NoSQL

 EN Wait-free memory reclamation and data structures
Ruslan Nikolaev
Virginia Tech
#memory reclamation
#wait-freedom #C/C++

18:30 – 19:45  EN Transactional memory
Maurice Herlihy
Brown University
#transactional-memory

 EN Designing distributed systems with TLA+
Hillel Wayne
Windy Coast Consulting
#TLA+ #formal-methods

 EN Interview and Q&A with Cindy Sridharan
Cindy Sridharan
#QnA #production #testing
#microservices

19:45 – 20:00 EN Conference closing
Alexey Fyodorov
JUG Ru Group

EN Conference closing
Vitaly Aksenov
ITMO University

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Vsevolod Brekelov
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Hardcore

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10:45 – 12:00  EN Erasure Coding at Scale
Maxim Babenko
 Yandex
 #distributed #erasurecoding #scale

 EN Synchronization primitives can be faster with SegmentQueueSynchronizer
Nikita Koval
 JetBrains
 #concurrency #semaphore #synchronization #locks

 EN HTAP made live — from the engineering perspective
Ed Huang
 PingCAP
 #HTAP #NewSQL #distributed-SQL #raft #distributed-database

12:00 – 13:15  EN Distributed and concurrent optimization for machine learning
Dan Alistarh
 IST Austria
 #ml #neuralnetworks #synchronization

 EN Scaling distributed ledgers: Achieving arbitrary throughput and sub-second latency
Alberto Sonnino
 Facebook Calibra
 #DistributedLedgers #Sharding #throughput #blockchain #performance #improvement

 EN Demystifying Bitcoin
Rachid Guerraoui
 EPFL
 #blockchain #energy-efficiency #distributed

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17:15 – 18:30 🙌 EN New locks for the old kernel
Alex Kogan
Oracle Labs
#performance #NUMA #locks
#Linux kernel

🙌 EN Tissue vs silicone musings on the future of deep learning hardware and software
Nir Shavit
MIT
#ml #future #deeplearning

🙌 EN Redundancy does not imply fault tolerance: Analysis of distributed storage reactions to single errors and corruptions
Aishwarya Ganesan
University of Wisconsin - Madison
#fault-tolerance #durability
#redundancy #research #reliability

18:30 – 19:45 🙌 EN Debugging data races
Cliff Click
CRATUS
#concurrency #tools #java

🙌 EN Java threads are losing weight performance review of Project Loom
Sergey Kuksenko
Oracle
#concurrency
#lightweight-threads

🙌 EN Extending PostgreSQL to Google Spanner architecture
Karthik Ranganathan
Yugabyte
#NewSQL #hybrid-clock
#distributed-SQL
#distributed-database
#transactions

13:15 – 13:30 EN Conference closing
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