Stanford



Christoforos Kozyrakis

Leonard Bosack and Sandy K. Lerner Professor of Engineering and Professor of Computer Science

Electrical Engineering

CONTACT INFORMATION

- **Administrator**

  Julie A. Hitchcock - Faculty Administrator

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Bio

BIO

Christos Kozyrakis is the Leonard Bosack and Sandy K. Lerner Professor of Engineering and a Professor of Electrical Engineering and Computer Science at Stanford University. His primary research areas are computer architecture and computer systems. His current work focuses on cloud computing, systems for machine learning, and machine learning for systems.

Christos holds a BS degree from the University of Crete and a PhD degree from the University of California at Berkeley. He is a fellow of the ACM and the IEEE. He has received the ACM SIGARCH Maurice Wilkes Award, the ISCA Influential Paper Award, the NSF Career Award, the Okawa Foundation Research Grant, and faculty awards by IBM, Microsoft, and Google.

ACADEMIC APPOINTMENTS

- Professor, Electrical Engineering
- Professor, Computer Science

HONORS AND AWARDS

- Maurice Wilkes Award, ACM SIGARCH (2015)
- Fellow, ACM (2016)
- Fellow, IEEE (2014)
- Faculty Award, IBM (2006)
- Career Award, National Science Foundation (2006)
- Research Grant, Okawa Foundation (2005)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Leonard Bosack and Sandy K. Lerner Professor of Engineering, School of Engineering (2025 - present)
- Willard R. and Inez Kerr Bell faculty scholar, Stanford University (2009 - 2011)

PROGRAM AFFILIATIONS

- Stanford SystemX Alliance

PROFESSIONAL EDUCATION

- PhD, University of California at Berkeley , Computer Science (2002)

LINKS

- http://www.stanford.edu/~kozyraki: http://www.stanford.edu/~kozyraki

Teaching

COURSES

2026-27

- AI Inference Infrastructure: CS 349D (Spr)
- Computer Systems Architecture: CS 282, EE 282 (Spr)
- Digital Systems Architecture: CS 180, EE 180 (Win)

2025-26

- AI Inference Infrastructure: CS 349D (Spr)
- Computer Systems Architecture: CS 282, EE 282 (Spr)
- Digital Systems Architecture: CS 180, EE 180 (Win)

2024-25

- Compound AI Systems: CS 349D (Spr)

2023-24

- Cloud Computing Technology: CS 349D (Spr)
- Digital Systems Architecture: EE 180 (Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Daniel Mendoza, Ioanna Vavelidou, Qizheng Zhang

Orals Evaluator

Jared Davis, Swapnil Gandhi, Zhiqiang Xie

Doctoral Dissertation Advisor (AC)

Swapnil Gandhi, Zhiqiang Xie

Master's Program Advisor

Jharell Bruce, Joseph Chen, Eric Cheng, Anya Chernova, Prerit Choudhary, Thibaud Clement, Larry Du, Albert Huang, Sarosh Khan, Thomas Li, Shengyuan Lu, Glenvelis Perez, Rishabh Sharad Pomaje, Nicholas Trank, Merritt Vassallo, Iona Xia, Jamin Xie

Doctoral (Program)

Osayamen Aimuyo, Swapnil Gandhi, Yuzhen Mao, Pete Warden, Caleb Winston, Zhiqiang Xie

Publications

PUBLICATIONS

- **ReCycle: Resilient Training of Large DNNs using Pipeline Adaptation** *ACM SIGOPS Symposium on Operating Systems Principles (SOSP)*
  Gandhi, S., Zhao, M., Skiadopoulos, A., Kozyrakis, C.
  2024
- **R³: Record-Replay-Retroaction for Database-Backed Applications** *PROCEEDINGS OF THE VLDB ENDOWMENT*
  Li, Q., Kraft, P., Cafarella, M., Demiralp, C., Graefe, G., Kozyrakis, C., Stonebraker, M., Suresh, L., Yu, X., Zaharia, M.
  2023; 16 (11): 3085-3097
- **Tectonic-Shift: A Composite Storage Fabric for Large-Scale ML Training**
  Zhao, M., Pan, S., Agarwal, N., Wen, Z., Xu, D., Natarajan, A., Kumar, P., Shiva, S. P., Tijoriwala, R., Asher, K., Wu, H., Basant, A., Ford, et al
  USENIX ASSOC.2023: 433-449
- **Honeycomb: Secure and Efficient GPU Executions via Static Validation**
  Mai, H., Zhao, J., Zheng, H., Zhao, Y., Liu, Z., Gao, M., Wang, C., Cui, H., Feng, X., Kozyrakis, C., USENIX Association
  USENIX ASSOC.2023: 155-172
- **Optimizing Video Analytics with Declarative Model Relationships** *PROCEEDINGS OF THE VLDB ENDOWMENT*
  Romero, F., Hauswald, J., Partap, A., Kang, D., Zaharia, M., Kozyrakis, C.
  2022; 16 (3): 447-460
- **RAIL: Predictable, Low Tail Latency for NVMe Flash** *ACM TRANSACTIONS ON STORAGE*
  Litz, H., Gonzalez, J., Klimovic, A., Kozyrakis, C.
  2022; 18 (1)
- **Towards mu s Tail Latency and Terabit Ethernet: Disaggregating the Host Network Stack**
  Cai, Q., Vuppalapati, M., Hwang, J., Kozyrakis, C., Agarwal, R., Assoc Comp Machinery
  ASSOC COMPUTING MACHINERY.2022: 767-779
- **Understanding Data Storage and Ingestion for Large-Scale Deep Recommendation Model Training**
  Zhao, M., Agarwal, N., Basant, A., Gedik, B., Pan, S., Ozdal, M., Komuravelli, R., Pan, J., Bao, T., Lu, H., Narayanan, S., Langman, J., Wilfong, et al
  ASSOC COMPUTING MACHINERY.2022: 1042-1057
- **SOL: Safe On-Node Learning in Cloud Platforms**
  Wang, Y., Crankshaw, D., Yadwadkar, N. J., Berger, D., Kozyrakis, C., Bianchini, R.
  edited by Falsafi, B., Ferdman, M., Lu, S., Weinisch, T.
  ASSOC COMPUTING MACHINERY.2022: 622-634
- **ShEF: Shielded Enclaves for Cloud FPGAs**
  Zhao, M., Gao, M., Kozyrakis, C.
  edited by Falsafi, B., Ferdman, M., Lu, S., Weinisch, T.
  ASSOC COMPUTING MACHINERY.2022: 1070-1085
- **RecShard: Statistical Feature-Based Memory Optimization for Industry-Scale Neural Recommendation**
  Sethi, G., Acun, B., Agarwal, N., Kozyrakis, C., Trippel, C., Wu, C.
  edited by Falsafi, B., Ferdman, M., Lu, S., Weinisch, T.
  ASSOC COMPUTING MACHINERY.2022: 344-358
- **DBOS: A DBMS-oriented Operating System**
  Skiadopoulos, A., Li, Q., Kraft, P., Kaffes, K., Hong, D., Mathew, S., Bestor, D., Cafarella, M., Gadepally, V., Graefe, G., Kepner, J., Kozyrakis, C., Kraska, et al
  ASSOC COMPUTING MACHINERY.2021: 21-30
- **RAMBO: Resource Allocation for Microservices Using Bayesian Optimization** *IEEE COMPUTER ARCHITECTURE LETTERS*
  Li, Q., Li, B., Mercati, P., Illikkal, R., Tai, C., Kishinevsky, M., Kozyrakis, C.
  2021; 20 (1): 46–49

- **INFaaS: Automated Model-less Inference Serving**
  Romero, F., Li, Q., Yadwadkar, N. J., Kozyrakis, C., USENIX ASSOC
  USENIX ASSOC.2021: 397-411
- **LLAMA: A Heterogeneous & Serverless Framework for Auto-Tuning Video Analytics Pipelines**
  Romero, F., Zhao, M., Yadwadkar, N. J., Kozyrakis, C., ACM
  ASSOC COMPUTING MACHINERY.2021: 1-17
- **Faa$T: A Transparent Auto-Scaling Cache for Serverless Applications**
  Romero, F., Chaudhry, G., Goiri, I., Gopa, P., Batum, P., Yadwadkar, N. J., Fonseca, R., Kozyrakis, C., Bianchini, R., ACM
  ASSOC COMPUTING MACHINERY.2021: 122-137
- **SmartHarvest: Harvesting Idle CPUs Safely and Efficiently in the Cloud**
  Wang, Y., Arya, K., Kogias, M., Vanga, M., Bhandari, A., Yadwadkar, N. J., Sen, S., Elnikety, S., Kozyrakis, C., Bianchini, R., ACM
  ASSOC COMPUTING MACHINERY.2021: 1-16
- **AsmDB: Understanding and Mitigating Front-End Stalls in Warehouse-Scale Computers** *IEEE MICRO*
  Nagendra, N., Ayers, G., August, D. I., Cho, H., Kanev, S., Kozyrakis, C., Krishnamurthy, T., Litz, H., Moseley, T., Ranganathan, P.
  2020; 40 (3): 56–63
- **The Hot Chips Renaissance** *IEEE MICRO*
  Kozyrakis, C., Bratt, I.
  2020; 40 (2): 6–7
- **Leveraging application classes to save power in highly-utilized data centers** *SoCC '20: ACM Symposium on Cloud Computing*
  Kaffes, K., Sbirlea, D., Lin, Y., Lo, D., Kozyrakis, C.
  2020
- **RackSched: A Microsecond-Scale Scheduler for Rack-Scale Computers**
  Zhu, H., Kaffes, K., Chen, Z., Liu, Z., Kozyrakis, C., Stoica, I., Jin, X., USENIX Assoc
  USENIX ASSOC.2020: 1225-1240
- **Classifying Memory Access Patterns for Prefetching**
  Ayers, G., Litz, H., Kozyrakis, C., Ranganathan, P., ACM
  ASSOC COMPUTING MACHINERY.2020: 513–26
- **Interstellar: Using Halide's Scheduling Language to Analyze DNN Accelerators**
  Yang, X., Gao, M., Liu, Q., Setter, J., Pu, J., Nayak, A., Bell, S., Cao, K., Ha, H., Raina, P., Kozyrakis, C., Horowitz, M., ACM
  ASSOC COMPUTING MACHINERY.2020: 369–83
- **Mind the Gap: A Case for Informed Request Scheduling at the NIC**
  Humphries, J., Kaffes, K., Mazieres, D., Kozyrakis, C., ACM
  ASSOC COMPUTING MACHINERY.2019: 60–68
- **AsmDB: Understanding and Mitigating Front-End Stalls in Warehouse-Scale Computers**
  Ayers, G., Nagendra, N., August, D., Cho, H., Kanev, S., Kozyrakis, C., Krishnamurthy, T., Litz, H., Moseley, T., Ranganathan, P., ACM
  ASSOC COMPUTING MACHINERY.2019: 462–73
- **From Laptop to Lambda: Outsourcing Everyday Jobs to Thousands of Transient Functional Containers**
  Fouladi, S., Romero, F., Iter, D., Li, Q., Chatterjee, S., Kozyrakis, C., Zaharia, M., Winstein, K., USENIX Assoc
  USENIX ASSOC.2019: 475–88
- **TANGRAM: Optimized Coarse-Grained Dataflow for Scalable NN Accelerators** *ASPLOS '19: Proceedings of the Twenty-Fourth International Conference on Architectural Support for Programming Languages and Operating Systems*
  Gao, M., Yang, X., Pu, J., Horowitz, M., Kozyrakis, C.
  2019: 807–20
- **Centralized Core-granular Scheduling for Serverless Functions** *SoCC '19: ACM Symposium on Cloud Computing*
  Kaffes, K., Yadwadkar, N. J., Kozyrakis, C.
  2019

- **Shinjuku: Preemptive Scheduling for mu second-scale Tail Latency**
  Kaffes, K., Chong, T., Humphries, J., Belay, A., Mazieres, D., Kozyrakis, C., USENIX Assoc
  USENIX ASSOC.2019: 345–59
- **A Case for Managed and Model-less Inference Serving**
  Yadwadkar, N. J., Romero, F., Li, Q., Kozyrakis, C., ACM
  ASSOC COMPUTING MACHINERY.2019: 184–91
- **QuMan: Profile-based Improvement of Cluster Utilization** *ACM TRANSACTIONS ON ARCHITECTURE AND CODE OPTIMIZATION*
  Sfakianakis, Y., Kozanitis, C., Kozyrakis, C., Bilas, A.
  2018; 15 (3)
- **Amdahl's Law for Tail Latency** *COMMUNICATIONS OF THE ACM*
  Delimitrou, C., Kozyrakis, C.
  2018; 61 (8): 65–72
- **Uncovering the Security Implications of Cloud Multi-Tenancy with Bolt** *IEEE MICRO*
  Delimitrou, C., Kozyrakis, C.
  2018; 38 (3): 86–97
- **Plasticine: A Reconfigurable Accelerator for Parallel Patterns** *IEEE MICRO*
  Prabhakar, R., Zhang, Y., Koeplinger, D., Feldman, M., Zhao, T., Hadjis, S., Pedram, A., Kozyrakis, C., Olukotun, K.
  2018; 38 (3): 20–31
- **GraphP: Reducing Communication for PIM-based Graph Processing with Efficient Data Partition**
  Zhang, M., Zhuo, Y., Wang, C., Gao, M., Wu, Y., Chen, K., Kozyrakis, C., Qian, X., IEEE
  IEEE.2018: 544–57
- **Making Pull-Based Graph Processing Performant**
  Grossman, S., Litz, H., Kozyrakis, C.
  ASSOC COMPUTING MACHINERY.2018: 246–60
- **Memory Hierarchy for Web Search**
  Ayers, G., Ahn, J., Kozyrakis, C., Ranganathan, P., IEEE
  IEEE.2018: 643–56
- **The IX Operating System: Combining Low Latency, High Throughput and Efficiency in a Protected Dataplane (vol 34, pg 11, 2017)** *ACM TRANSACTIONS ON COMPUTER SYSTEMS*
  Belay, A., Prekas, G., Primorac, M., Klimovic, A., Grossman, S., Kozyrakis, C., Bugnion, E.
  2017; 35 (3)
- **TETRIS: Scalable and Efficient Neural Network Acceleration with 3D Memory** *ACM SIGPLAN NOTICES*
  Gao, M., Pu, J., Yang, X., Horowitz, M., Kozyrakis, C.
  2017; 52 (4): 751-764
- **Bolt: I Know What You Did Last Summer... In the Cloud** *ACM SIGPLAN NOTICES*
  Delimitrou, C., Kozyrakis, C.
  2017; 52 (4): 599-613
- **ReFlex: Remote Flash approximate to Local Flash** *ACM SIGPLAN NOTICES*
  Klimovic, A., Litz, H., Kozyrakis, C.
  2017; 52 (4): 345-359
- **The IX Operating System: Combining Low Latency, High Throughput, and Efficiency in a Protected Dataplane** *ACM TRANSACTIONS ON COMPUTER SYSTEMS*
  Belay, A., Prekas, G., Primorac, M., Klimovic, A., Grossman, S., Kozyrakis, C., Bugnion, E.
  2017; 34 (4)
- **Persona: A High-Performance Bioinformatics Framework**
  Byma, S., Whitlock, S., Flueratoru, L., Tseng, E., Kozyrakis, C., Bugnion, E., Larus, J., USENIX Assoc

USENIX ASSOC.2017: 153–65

- **Special Session Paper 3D Nanosystems Enable Embedded Abundant-Data Computing**
  Hwang, W., Aly, M., Malviya, Y. H., Gao, M., Wu, T. F., Kozyrakis, C., Wong, H., Mitra, S., IEEE
  IEEE.2017
- **Security Implications of Data Mining in Cloud Scheduling** *IEEE COMPUTER ARCHITECTURE LETTERS*
  Delimitrou, C., Kozyrakis, C.
  2016; 15 (2): 109-112
- **Improving Resource Efficiency at Scale with Heracles** *ACM TRANSACTIONS ON COMPUTER SYSTEMS*
  Lo, D., Cheng, L., Govindaraju, R., Ranganathan, P., Kozyrakis, C.
  2016; 34 (2)
- **Generating Configurable Hardware from Parallel Patterns** *ACM SIGPLAN NOTICES*
  Prabhakar, R., Koeplinger, D., Brown, K. J., Lee, H., De Sa, C., Kozyrakis, C., Olukotun, K.
  2016; 51 (4): 651-665
- **HCloud: Resource-Efficient Provisioning in Shared Cloud Systems** *ACM SIGPLAN NOTICES*
  Delimitrou, C., Kozyrakis, C.
  2016; 51 (4): 473-488
- **Energy-Efficient Abundant-Data Computing: The N3XT 1,000x** *COMPUTER*
  Aly, M. M., Gao, M., Hills, G., Lee, C., Pitner, G., Shulaker, M. M., Wu, T. F., Asheghi, M., Bokor, J., Franchetti, F., Goodson, K. E., Kozyrakis, C., Markov, et al
  2015; 48 (12): 24-33
- **Convolution Engine: Balancing Efficiency and Flexibility in Specialized Computing** *COMMUNICATIONS OF THE ACM*
  Qadeer, W., Hameed, R., Shacham, O., Venkatesan, P., Kozyrakis, C., Horowitz, M.
  2015; 58 (4): 85-93
- **QUALITY-OF-SERVICE-AWARE SCHEDULING IN HETEROGENEOUS DATACENTERS WITH PARAGON** *IEEE MICRO*
  Delimitrou, C., Kozyrakis, C.
  2014; 34 (3): 17-30
- **Quasar: Resource-Efficient and QoS-Aware Cluster Management** *ACM SIGPLAN NOTICES*
  Delimitrou, C., Kozyrakis, C.
  2014; 49 (4): 127-143
- **Dynamic Management of TurboMode in Modern Multi-core Chips**
  Patterson, D., Kozyrakis, C.
  2014
- **Quasar: Resource-Efficient and QoS-Aware Cluster Management**
  Delimitrou, C., Kozyrakis, C.
  2014
- **QoS-Aware Scheduling in Heterogeneous Datacenters with Paragon** *ACM TRANSACTIONS ON COMPUTER SYSTEMS*
  Delimitrou, C., Kozyrakis, C.
  2013; 31 (4)
- **Measuring and analyzing the energy use of enterprise computing systems** *SUSTAINABLE COMPUTING-INFORMATICS & SYSTEMS*
  Kazandjieva, M., Heller, B., Gnawali, O., Levis, P., Kozyrakis, C.
  2013; 3 (3): 218-229
- **Paragon: QoS-Aware Scheduling for Heterogeneous Datacenters** *ACM SIGPLAN NOTICES*
  Delimitrou, C., Kozyrakis, C.
  2013; 48 (4): 77-88
- **Guest Editors' Introduction SELECTED RESEARCH FROM HOT CHIPS 24** *IEEE MICRO*
  Kozyrakis, C., Zahir, R.

2013; 33 (2): 6-7

- **The Netflix Challenge: Datacenter Edition** *IEEE COMPUTER ARCHITECTURE LETTERS*
  Delimitrou, C., Kozyrakis, C.
  2013; 12 (1): 29-32
- **iBench: Quantifying Interference for Datacenter Applications** *IEEE International Symposium on Workload Characterization (IISWC)*
  Delimitrou, C., Kozyrakis, C.
  IEEE.2013: 23–33
- **ZSim: Fast and Accurate Microarchitectural Simulation of Thousand-Core Systems**
  Sanchez, D., Kozyrakis, C.
  2013
- **iBench: Quantifying Interference for Datacenter Workloads**
  Delimitrou, C., Kozyrakis, C.
  2013
- **Convolution Engine: Balancing Efficiency and Flexibility in Specialized Computing**
  Qadeer, W., Hameed, R., Shacham, O., Venkatesan, P., Kozyrakis, C., Horowitz, M.
  2013
- **Measuring and analyzing the energy use of enterprise computing systems** *Sustainable Computing: Informatics and Systems*
  Kazandjieva, M., Heller, B., Gnawali, O., Levis, P., Kozyrakis, C.
  2013
- **Resource Efficienct Computing for Warehouse-scale Datacenters**
  Kozyrakis, C.
  2013
- **QoS-Aware Admission Control in Heterogeneous Datacenters**
  Delimitrou, C., Bambos, N., Kozyrakis, C.
  2013
- **Enhanced Concurrency Control with Transactional NACKs**
  Baek, W., Yoo, R., Kozyrakis, C.
  2013
- **Locality-Aware Task Management for Unstructured Parallelism: A Quantitative Limit Study**
  Yoo, R., Hughes, C., Kim, C., Chen, Y., Kozyrakis, C.
  2013
- **QoS-Aware Scheduling in Heterogeneous Datacenters with Paragon** *ACM Transactions on Computer Systems (TOCS)*
  Delimitrou, C., Kozyrakis, C.
  2013; 31 (4)
- **Decoupling Datacenter Storage Studies from Access to Large-Scale Applications** *IEEE COMPUTER ARCHITECTURE LETTERS*
  Delimitrou, C., Sankar, S., Vaid, K., Kozyrakis, C.
  2012; 11 (2): 53-56
- **SCALABLE AND EFFICIENT FINE-GRAINED CACHE PARTITIONING WITH VANTAGE** *IEEE MICRO*
  Sanchez, D., Kozyrakis, C.
  2012; 32 (3): 26-37
- **Hardware Acceleration of Transactional Memory on Commodity Systems** *ACM SIGPLAN NOTICES*
  Casper, J., Oguntebi, T., Hong, S., Bronson, N. G., Kozyrakis, C., Olukotun, K.
  2012; 47 (4): 27-38
- **Improving System Energy Efficiency with Memory Rank Subsetting** *ACM TRANSACTIONS ON ARCHITECTURE AND CODE OPTIMIZATION*
  Ahn, J. H., Jouppi, N. P., Kozyrakis, C., Leverich, J., Schreiber, R. S.

2012; 9 (1)

- **Green Enterprise Computing Data: Assumptions and Realities** *3rd International Green Computing Conference (IGCC)*
  Kazandjieva, M., Heller, B., Gnawali, O., Levis, P., Kozyrakis, C.
  IEEE.2012
- **Dune: Safe User-level Access to Privileged CPU Features**
  Belay, A., Bittau, A., Mashtizadeh, A., Terei, D., Mazie`res, D., Kozyrakis, C.
  2012
- **ECHO: Recreating Network Traffic Maps for Datacenters of Tens of Thousands of Servers**
  Delimitrou, C., Sanka, S., Kansal, A., Kozyrakis, C.
  2012
- **A Case of System-level Hardware/Software Co-design and Co-verification of a Commodity Multi-Processor System with Custom Hardware** *10th ACM International Conference on Hardware/Software-Codesign and System Synthesis*
  Hong, S., Oguntebi, T., Casper, J., Bronson, N., Kozyrakis, C., Olukotun, K.
  ASSOC COMPUTING MACHINERY.2012: 513–519
- **Towards Energy-Proportional Datacenter Memory with Mobile DRAM** *39th Annual International Symposium on Computer Architecture (ISCA)*
  Malladi, K. T., Nothaft, F. A., Periyathambi, K., Lee, B. C., Kozyrakis, C., Horowitz, M.
  IEEE.2012: 37–48
- **SCD: A Scalable Coherence Directory with Flexible Sharer Set Encoding** *18th IEEE International Symposium on High-Performance Computer Architecture (HPCA)*
  Sanchez, D., Kozyrakis, C.
  IEEE.2012: 129–140
- **Understanding Sources of Inefficiency in General-Purpose Chips** *COMMUNICATIONS OF THE ACM*
  Hameed, R., Qadeer, W., Wachs, M., Azizi, O., Solomatnikov, A., Lee, B. C., Richardson, S., Kozyrakis, C., Horowitz, M.
  2011; 54 (10): 85-93
- **The Case for RAMCloud** *COMMUNICATIONS OF THE ACM*
  Ousterhout, J., Agrawal, P., Erickson, D., Kozyrakis, C., Leverich, J., Mazieres, D., Mitra, S., Narayanan, A., Ongaro, D., Parulkar, G., Rosenblum, M., Rumble, S. M., Stratmann, et al
  2011; 54 (7): 121-130
- **Hardware Acceleration of Transactional Memory on Commodity Systems** *ACM SIGPLAN NOTICES*
  Casper, J., Oguntebi, T., Hong, S., Bronson, N. G., Kozyrakis, C., Olukotun, K.
  2011; 46 (3): 27-38
- **Decoupling Datacenter Studies from Access to Large-Scale Applications: A Modeling Approach for Storage Workloads** *IEEE International Symposium on Workload Characterization (IISWC)*
  Delimitrou, C., Sankar, S., Vaid, K., Kozyrakis, C.
  IEEE.2011: 51–60
- **Storage I/O Generation and Replay for Datacenter Applications**
  Delimitrou, C., Sankar, S., Vaid, K., Kozyrakis, C.
  2011
- **Time and Cost-Efficient Modeling and Generation of Large-Scale TPCC/TPCE/TPCH**
  Delimitrou, C., Sankar, S., Khessib, B., Vaid, K., Kozyrakis, C.
  2011
- **Phoenix++: Modular MapReduce for Shared-Memory Systems**
  Talbot, J., Yoo, R., Kozyrakis, C.
  2011
- **Dynamic Fine-Grain Scheduling of Pipeline Parallelism**
  Sanchez, D., Lo, D., Yoo, R., Sugerman, J., Kozyrakis, C.
  2011

- **Accurate Modeling and Generation of Storage I/O for Datacenter Workloads**
  Delimitrou, C., Sankar, S., Vaid, K., Kozyrakis, C.
  2011
- **Understanding Sources of Inefficiency in General-Purpose Chips** *Communications of the ACM (CACM)*
  Hameed, R., Qadeer, W., Wachs, M., Azizi, O., Solomatnikov, A., Lee, Benjamin, C., Kozyrakis, C.
  2011; 54 (10)
- **Vantage: Scalable and Efficient Fine-Grain Cache Partitioning** *38th Annual International Symposium on Computer Architecture*
  Sanchez, D., Kozyrakis, C.
  ASSOC COMPUTING MACHINERY.2011: 57–68
- **SERVER ENGINEERING INSIGHTS FOR LARGE-SCALE ONLINE SERVICES** *IEEE MICRO*
  Kozyrakis, C., Kansal, A., Sankar, S., Vaid, K.
  2010; 30 (4): 8-19
- **An Analysis of On-Chip Interconnection Networks for Large-Scale Chip Multiprocessors** *ACM TRANSACTIONS ON ARCHITECTURE AND CODE OPTIMIZATION*
  Sanchez, D., Michelogiannakis, G., Kozyrakis, C.
  2010; 7 (1)
- **Flexible Architectural Support for Fine-Grain Scheduling** *ACM SIGPLAN NOTICES*
  Sanchez, D., Yoo, R. M., Kozyrakis, C.
  2010; 45 (3): 311-322
- **Understanding Sources of Inefficiency in General-Purpose Chips** *37th International Symposium on Computer Architecture*
  Hameed, R., Qadeer, W., Wachs, M., Azizi, O., Solomatnikov, A., Lee, B. C., Richardson, S., Kozyrakis, C., Horowitz, M.
  ASSOC COMPUTING MACHINERY.2010: 37–47
- **Making Nested Parallel Transactions Practical using Lightweight Hardware Support**
  Baek, W., Bronson, N., Kozyrakis, C., Olukotun, K.
  2010
- **EigenBench: A Simple Exploration Tool for Orthogonal TM Characteristics**
  Hong, S., Oguntebi, T., Casper, J., Bronson, N., Kozyrakis, C., Olukotun, K.
  2010
- **The ZCache: Decoupling Ways and Associativity**
  Sanchez, D., Kozyrakis, C.
  2010
- **Implementing and Evaluating a Model Checker for Transactional Memory Systems**
  Baek, W., Bronson, N., Kozyrakis, C., Olukotun, K.
  2010
- **Evaluating Bufferless Flow Control for On-Chip Networks**
  Michelogiannakis, G., Sanchez, D., Dally, William, J., Kozyrakis, C.
  2010
- **Implementing and Evaluating Nested Parallel Transactions in Software Transactional Memory** *22nd ACM Symposium on Parallelism in Algorithms and Architectures*
  Baek, W., Bronson, N., Kozyrakis, C., Olukotun, K.
  ASSOC COMPUTING MACHINERY.2010: 253–262
- **Evaluating Bufferless Flow Control for On-Chip Networks**
  Michelogiannakis, G., Sanchez, D., Dally, William, J., Kozyrakis, C.
  2010
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