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

  Email julieh1@stanford.edu

  Tel 650.736.4454

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

2025-26

- Compound AI Systems: 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)

2022-23

- An Intro to Making: What is EE: ENGR 40M (Spr)
- Cloud Computing Technology: CS 349D (Spr)
- Colloquium on Computer Systems: EE 380 (Win, Spr)
- Digital Systems Architecture: EE 180 (Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Daniel Mendoza, Ioanna Vavelidou, Qizheng Zhang

Master's Program Advisor

Joseph Chen, Prerit Choudhary, Alex Gu, Sarosh Khan, Thomas Li, Eric Melendez, Rishabh Sharad Pomaje, Nicholas Trank, Merritt Vassallo, Iona Xia, Weixin Yu

Doctoral (Program)

Osayamen Aimuyo, Swapnil Gandhi, 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
- **FARM: A Prototyping Environment for Tightly-Coupled, Heterogeneous Architectures**
  Oguntebi, T., Hong, S., Casper, J., Bronson, N., Kozyrakis, C., Olukotun, K.
  2010
- **Tainting is Not Pointless** *ACM SIGOPS Operating Systems Review*
  Dalton, M., Kannan, H., Kozyrakis, C.
  2010; 44 (2)
- **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
- **Power Management of Datacenter Workloads Using Per-Core Power Gating** *IEEE COMPUTER ARCHITECTURE LETTERS*
  Leverich, J., Monchiero, M., Talwar, V., Ranganathan, P., Kozyrakis, C.
  2009; 8 (2): 48-51
- **HOT CHIPS TURNS 20** *IEEE MICRO*
  Kozyrakis, C., van de Waerdt, J.

2009; 29 (2): 4-5

- **Phoenix Rebirth: Scalable MapReduce on a Large-Scale Shared-Memory System** *IEEE International Symposium on Workload Characterization*
  Yoo, R. M., Romano, A., Kozyrakis, C.
  IEEE COMPUTER SOC.2009: 198–207
- **On the Energy (In)Efficiency of Hadoop Clusters**
  Leverich, J., Kozyrakis, C.
  2009
- **On the Energy (In)Efficiency of Hadoop Clusters**
  Leverich, J., Kozyrakis, C.
  2009
- **The Stanford Pervasive Parallelism Lab**
  Kozyrakis, C., Olukotun, K.
  2009
- **Energy Dumpster Diving**
  Kazandjieva, M., Heller, B., Levis, P., Kozyrakis, C.
  2009
- **Energy Dumpster Diving**
  Kazandjieva, M., Heller, B., Levis, P., Kozyrakis, C.
  2009
- **Nemesis: Preventing Authentication & Access Control Vulnerabilities in Web Applications**
  Dalton, M., Kozyrakis, C., Zeldovich, N.
  2009
- **The case for RAMClouds: scalable high-performance storage entirely in DRAM** *ACM SIGOPS Operating Systems Review*
  Ousterhout, J., Agrawal, P., Erickson, D., Kozyrakis, C., Leverich, J., Mazières, D.
  2009; 43 (4)
- **Future Scaling of Processor-Memory Interfaces** *Conference on High Performance Computing Networking, Storage and Analysis*
  Ahn, J. H., Jouppi, N. P., Kozyrakis, C., Leverich, J., Schreiber, R. S.
  IEEE.2009
- **Fast Memory Snapshot for Concurrent Programming without Synchronization** *ACM SIGARCH International Conference on Supercomputing*
  Chung, J., Baek, W., Kozyrakis, C.
  ASSOC COMPUTING MACHINERY.2009: 117–125
- **A Memory System Design Framework: Creating Smart Memories** *36th Annual International Symposium on Computer Architecture*
  Firoozshahian, A., Solomatnikov, A., Shacham, O., Asgar, Z., Richardson, S., Kozyrakis, C., Horowitz, M.
  ASSOC COMPUTING MACHINERY.2009: 406–417
- **Decoupling Dynamic Information Flow Tracking with a Dedicated Coprocessor** *39th Annual IEEE/IFIP International Conference on Dependable Systems and Networks*
  Kannan, H., Dalton, M., Kozyrakis, C.
  IEEE.2009: 105–114
- **Feedback-Directed Barrier Optimization in a Strongly Isolated STM** *ACM SIGPLAN NOTICES*
  Bronson, N. G., Kozyrakis, C., Olukotun, K.
  2009; 44 (1): 213-225
- **Comparative Evaluation of Memory Models for Chip Multiprocessors** *ACM TRANSACTIONS ON ARCHITECTURE AND CODE OPTIMIZATION*
  Leverich, J., Arakida, H., Solomatnikov, A., Firoozshahian, A., Horowitz, M., Kozyrakis, C.
  2008; 5 (3)
- **Transactional memory** *COMMUNICATIONS OF THE ACM*

Larus, J., Kozyrakis, C.
2008; 51 (7): 80-88

- **Improving Software Concurrency with Hardware-assisted Memory Snapshot** *20th ACM Symposium on Parallelism in Algorithms and Architectures*
  Chung, J., Seo, J., Baek, W., Minh, C. C., McDonald, A., Kozyrakis, C., Olukotun, K.
  ASSOC COMPUTING MACHINERY.2008: 363–363
- **Hardware Enforcement of Application Security Policies**
  Zeldovich, N., Kannan, H., Dalton, M., Kozyrakis, C.
  2008
- **A Comparison of High-Level Full-System Power Models**
  Rivoire, S., Ranganathan, P., Kozyrakis, C.
  2008
- **Real-World Buffer Overflow Protection for Userspace and Kernelspace**
  Dalton, M., Kannan, H., Kozyrakis, C.
  2008
- **ASeD: Availability, Security, and Debugging Support using Transactional Memory** *20th ACM Symposium on Parallelism in Algorithms and Architectures*
  Chung, J., Baek, W., Bronson, N. G., Seo, J., Kozyrakis, C., Olukotun, K.
  ASSOC COMPUTING MACHINERY.2008: 366–366
- **STAMP: Stanford Transactional Applications for Multi-Processing** *IEEE International Symposium on Workload Characterization*
  Minh, C. C., Chung, J., Kozyrakis, C., Olukotun, K.
  IEEE.2008: 31–42
- **Thread-Safe Dynamic Binary Translation using Transactional Memory** *14th International Symposium on High-Performance Computer Architecture*
  Chung, J., Dalton, M., Kannan, H., Kozyrakis, C.
  IEEE.2008: 256–266
- **Models and metrics to enable energy-efficiency optimizations** *COMPUTER*
  Rivoire, S., Shah, M. A., Ranganathan, P., Kozyrakis, C., Meza, J.
  2007; 40 (12): 39-?
- **RAMP: Research accelerator for multiple processors** *Hot Chips 18 Conference*
  Wawrzynek, J., Patterson, D., Oskin, M., Lu, S., Kozyrakis, C., Hoe, J. C., Chiou, D., Asanovic, K.
  IEEE COMPUTER SOC.2007: 46–57
- **Towards Soft Optimization Techniques for Parallel Cognitive Applications** *19th Annual Symposium on Parallelism in Algorithms and Architectures*
  Baek, W., Chung, J., Minh, C. C., Kozyrakis, C., Olukotun, K.
  ASSOC COMPUTING MACHINERY.2007: 59–60
- **The OpenTM Transactional Application Programming Interface**
  Baek, W., Minh, C. C., Trautmann, M., Kozyrakis, C., Olukotun, K.
  2007
- **RAMP: Research Accelerator for Multiple Processors** *IEEE Micro*
  Wawrzynek, J., Patterson, D., Oskin, M., Lu, S., Kozyrakis, C., Hoe, J.
  2007; 27 (2)
- **A Low Power Front-end for Embedded Processors using a Block-aware Instruction Set**
  Zmily, A., Kozyrakis, C.
  2007
- **JouleSort: A Balanced Energy-Efficiency Benchmark**
  Rivoire, S., Shah, Mehul, A., Ranganathan, P., Kozyrakis, C.

2007

- **Raksha: A Flexible Architecture for Software Security**
  Kannan, H., Dalton, M., Kozyrakis, C.
  2007
- **Raksha: A Flexible Information Flow Architecture for Software Security** *34th Annual International Symposium on Computer Architecture*
  Dalton, M., Kannan, H., Kozyrakis, C.
  ASSOC COMPUTING MACHINERY.2007: 482–493
- **A Practical FPGA-based Framework for Novel CMP Research** *15th ACM/SIGDA International Symposium on Field-Programmable Gate Arrays*
  Wee, S., Casper, J., Njoroge, N., Tesylar, Y., Ge, D., Kozyrakis, C., Olukotun, K.
  ASSOC COMPUTING MACHINERY.2007: 116–125
- **Transactional Collection Classes** *ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming*
  Carlstrom, B. D., McDonald, A., Carbin, M., Kozyrakis, C., Olukotun, K.
  ASSOC COMPUTING MACHINERY.2007: 56–67
- **ATLAS: A chip-multiprocessor with Transactional Memory support** *Design, Automation and Test in Europe Conference and Exhibition (DATE 07)*
  Njoroge, N., Casper, J., Wee, S., Teslyar, Y., Ge, D., Kozyrakis, C., Olukotun, K.
  IEEE.2007: 3–8
- **Transactional memory: The hardware-software interface** *IEEE MICRO*
  McDonald, A., Carlstrom, B. D., Chung, J., Minh, C. C., Chafi, H., Kozyrakis, C., Olukotun, K.
  2007; 27 (1): 67-76
- **Comparing Memory Systems for Chip Multiprocessors** *34th Annual International Symposium on Computer Architecture*
  Leverich, J., Arakida, H., Solomatnikov, A., Firoozshahian, A., Horowitz, M., Kozyrakis, C.
  ASSOC COMPUTING MACHINERY.2007: 358–368
- **An Effective Hybrid Transactional Memory System with Strong Isolation Guarantees** *34th Annual International Symposium on Computer Architecture*
  Minh, C. C., Trautmann, M., Chung, J., McDonald, A., Bronson, N., Casper, J., Kozyrakis, C., Olukotun, K.
  ASSOC COMPUTING MACHINERY.2007: 69–80
- **A scalable, non-blocking approach to transactional memory** *13th International Symposium on High-Performance Computer Architecture*
  Chafi, H., Casper, J., Carlstrom, B. D., McDonald, A., Minh, C. C., Baek, W., Kozyrakis, C., Olukotun, K.
  IEEE COMPUTER SOC.2007: 97–108
- **Register pointer architecture for efficient embedded processors** *Design, Automation and Test in Europe Conference and Exhibition (DATE 07)*
  Park, J., Park, S., Balfour, J. D., Black-Schaffer, D., Kozyrakis, C., Dally, W. J.
  IEEE.2007: 600–605
- **Evaluating MapReduce for multi-core and multiprocessor systems** *13th International Symposium on High-Performance Computer Architecture*
  Ranger, C., Raghuraman, R., Penmetsa, A., Bradski, G., Kozyrakis, C.
  IEEE COMPUTER SOC.2007: 13–24
- **Executing Java programs with transactional memory** *OOPSLA Workshop on Synchronization and Concurrent in Object-Oriented Languages*
  Carlstrom, B. D., Chung, J., Chafi, H., McDonald, A., Minh, C. C., Hammond, L., Kozyrakis, C., Olukotun, K.
  ELSEVIER SCIENCE BV.2006: 111–29
- **Tradeoffs in transactional memory virtualization** *ACM SIGPLAN NOTICES*
  Chung, J., Minh, C. C., McDonald, A., Skare, T., Chafi, H., Carlstrom, B. D., Kozyrakis, C., Olukotun, K.
  2006; 41 (11): 371-381
- **The ATOMO Sigma transactional programming language** *ACM SIGPLAN NOTICES*
  Carlstrom, B. D., McDonald, A., Chafi, H., Chung, J., Minh, C. C., Kozyrakis, C., Olukotun, K.
  2006; 41 (6): 1-13
- **Vector lane threading** *35th International Conference on Parallel Processing*

Rivoire, S., Schultz, R., Okuda, T., Kozyrakis, C.
IEEE COMPUTER SOC.2006: 55–62

- **Parallelizing SPECjbb2000 with Transactional Memory**
  Chung, J., Minh, C. C., Carlstrom, Brian, D., Kozyrakis, C.
  2006
- **Early Release: Friend or Foe**
  Skare, T., Kozyrakis, C.
  2006
- **Deconstructing Hardware Architectures for Security**
  Dalton, M., Kannan, H., Kozyrakis, C.
  2006
- **Unlocking Concurrency: Multicore Programming with Transactional Memor** *ACM Queue*
  Adl-Tabatabai, A., Kozyrakis, C., Saha, B.
  2006; 4 (10)
- **Library-based Prefetching for Pointer Intensive Applications** *Online Technical Manuscript*
  Malhotra, V., Kozyrakis, C.
  2006
- **Building and Using the ATLAS Transactional Memory System**
  Njoroge, N., Wee, S., Casper, J., Burdick, J., Teslyar, Y., Kozyrakis, C.
  2006
- **Tutorial: Transactional Programming In A Multi-core Environment**
  Adl-Tabatabai, A., Kozyrakis, C., Saha, B.
  2006
- **CEARCH: Cognition Enabled Architecture**
  Crago, S., McMahon, et al., J.
  2006
- **The Software Stack for Transactional Memory: Challenges and Opportunities**
  Calrstrom, Brian, D., Chung, J., Kozyrakis, C., Olukotun, K.
  2006
- **Full-system Power Analysis and Modeling for Server Environments**
  Economou, D., Rivoire, S., Kozyrakis, C., Ranganathan, P.
  2006
- **Testing Implementations of Transactional Memory**
  Manovit, C., Hangal, S., McDonald, A., Chafi, H., Kozyrakis, C., Olukotun, K.
  2006
- **RAMP: Research Accelerator for Multiple Processors**
  Arvind, D., Patterson, Asanovic, K., Chiou, D., Hoe, J., Kozyrakis, C., Lu, S.
  2006
- **From Chaos to QoS: Case Studies in CMP Resource Management**
  Kannan, H., Guo, F., Zhao, L., Illikkal, R., Iyer, R., Newell, D., Kozyrakis, C.
  2006
- **Block Aware Instruction Set Architecture** *ACM Transactions on Architecture and Code Optimization*
  Zmily, A., Kozyrakis, C.
  2006; 3 (3): 327-357
- **The common case transactional behavior of multithreaded programs** *12th International Symposium on High-Performance Computer Architecture*

Chung, J., Chafi, H., Minh, C. C., McDonald, A., Carlstrom, B., Kozyrakis, C., Olukotun, K.
IEEE COMPUTER SOC.2006: 271–282

- **Simultaneously improving code size, performance, and energy in embedded processors** *Design, Automation and Test in Europe Conference and Exhibition (DATE 06)*
  Zmily, A., Kozyrakis, C.
  IEEE.2006: 222–227
- **Architectural semantics for practical Transactional Memory** *33rd International Symposium on Computer Architecture*
  McDonald, A., Chung, J., Carlstrom, B. D., Minh, C. C., Chafi, H., Kozyrakis, C., Olukotun, K.
  IEEE COMPUTER SOC.2006: 53–64
- **Heuristics for profile-driven method-level speculative parallelization** *34th International Conference on Parallel Processing (ICPP)*
  Whaley, J., Kozyrakis, C.
  IEEE COMPUTER SOC.2005: 147–156
- **Transactional Execution of Java Programs**
  Calrstrom, Brian, D., Chung, J., Chafi, H., McDonald, A., Hammond, C. M., Kozyrakis, C.
  2005
- **TAPE: a Transactional Application Profiling Environment**
  Chafi, H., McDonald, A., Minh, C. C., Chung, J., Carlstrom, B., Hammond, L., Kozyrakis, C.
  2005
- **RAMP: Research Accelerator for Multiple Processors - A Community Vision for a Shared Experimental Parallel HW/SW Platform** *UC Berkeley Technical Report UCB/CSD-05-1412*
  Asanović, K. A., Chiou, D., Hoe, James, C., Kozyrakis, C., Lu, S., Oskin, M.
  2005
- **Autonomic power management schemes for Internet servers and data centers** *IEEE Global Telecommunications Conference (GLOBECOM 05)*
  Mastroleon, L., Bambos, N., Kozyrakis, C., Economou, D.
  IEEE.2005: 943–947
- **Improving instruction delivery with a block-aware ISA** *11th International Euro-Par Conference*
  Zmily, A., Killian, E., Kozyrakis, C.
  SPRINGER-VERLAG BERLIN.2005: 530–539
- **Characterization of TCC on chip-multiprocessors** *14th International Conference on Parallel Architectures and Compilation Techniques*
  McDonald, A., Chung, J. W., Chafi, H., Minh, C. C., Carlstrom, B. D., Hammond, L., Kozyrakis, C., Olukotun, K.
  IEEE COMPUTER SOC.2005: 63–74
- **Energy-efficient and high-performance instruction fetch using a block-aware ISA** *International Symposium on Low Power Electronics and Design*
  Zmily, A., Kozyrakis, C.
  ASSOC COMPUTING MACHINERY.2005: 36–41
- **Transactional coherence and consistency: Simplifying parallel hardware and software** *IEEE MICRO*
  Hammond, L., Carlstrom, B. D., Wong, V., Chen, M., Kozyrakis, C., Olukotun, K.
  2004; 24 (6): 92-103
- **Programming with transactional coherence and consistency (TCC)** *11th International Conference on Architectural Support for Programming Languages and Operating Systems*
  Hammond, L., Carlstrom, B. D., Wong, V., Hertzberg, B., Chen, M., Kozyrakis, C., Olukotun, K.
  ASSOC COMPUTING MACHINERY.2004: 1–13
- **Transactional memory coherence and consistency** *31st Annual International Symposium on Computer Architecture*
  Hammond, L., Wong, V., Chen, M., Carlstrom, B. D., Davis, J. D., Hertzberg, B., Prabhu, M. K., Wijaya, H., Kozyrakis, C., Olukotun, K.
  IEEE COMPUTER SOC.2004: 102–113
- **VIRAM-1: A Media-Oriented Vector Processor with Embedded DRAM**
  Gebis, J., William, S., Kozyrakis, C., Patterson, D.

2004

- **Transactional Memory Coherence and Consistency (TCC)**
  Hammond, L., Wong, V., Chen, M., Hertzberg, B., Carlstrom, B., Prabhu, M., Kozyrakis, C.
  2004
- **Stream Virtual Machine and Two-Level Compilation Model for Streaming Architectures and Languages**
  Mattson, P., Lethin, R., Litvinov, V., Labonte, F., Buck, I., Kozyrakis, C.
  2004
- **The stream virtual machine** *13th International Conference on Parallel Architecture and Compilation Techniques*
  Labonte, F., Mattson, P., Thies, W., Buck, I., Kozyrakis, C., Horowitz, M.
  IEEE COMPUTER SOC.2004: 267–277
- **Scalable vector processors for embedded systems** *IEEE MICRO*
  Kozyrakis, C. E., Patterson, D. A.
  2003; 23 (6): 36-45
- **Overcoming the limitations of conventional vector processors** *30th Annual International Symposium on Computer Architecture*
  Kozyrakis, C., Patterson, D.
  IEEE COMPUTER SOC.2003: 399–409
- **Vector vs. superscalar and VLIW architectures for embedded multimedia benchmarks** *35th Annual IEEE/ACM International Symposium on Microarchitecture*
  Kozyrakis, C., Patterson, D.
  IEEE COMPUTER SOC.2002: 283–293
- **Hardware/compiler codevelopment for an embedded media processor** *PROCEEDINGS OF THE IEEE*
  Kozyrakis, C., Judd, D., Gebis, J., Williams, S., Patterson, D., Yelick, K.
  2001; 89 (11): 1694-1709
- **Hardware/compiler Codevelopment for an Embedded Media Processor**
  Kozyrakis, C., Judd, D., Gebis, J., Williams, S., Patterson, D., Yelick, K.
  2001
- **Lecture Notes in Computer Science**
  edited by Chong, F., Kozyrakis, C., Oskin, M.
  2001
- **Vector IRAM: A Media-oriented Vector Processor with Embedded DRAM** *Technical Record of the 12th Hot Chips Conference*
  Kozyrakis, C., Gebis, J., Martin, D., Williams, S., Mavroidis, I., Pope, S.
  2000
- **Exploiting On-chip Memory Bandwidth in the VIRAM Compiler**
  Judd, D., Yelick, K., Kozyrakis, C., Martin, D., Patterson, D.
  2000
- **Explicitly Parallel Architectures for Memory Performance Enhancement**
  Kozyrakis, C.
  2000
- **Vector IRAM: A Media-oriented Vector Processor with Embedded DRAM**
  Kozyrakis, C., Gebis, J., Martin, D., Williams, S., Mavroidis, I., Pope, S.
  2000
- **A Media-Enhanced Vector Architecture for Embedded Memory Systems** *Technical Report UCB-CSD-99-1059, University of California at Berkeley*
  Kozyrakis, C., Thesis, M., S.
  1999

- **High-Performance Architectures for Embedded Memory Systems**
  Kozyrakis, C.
  1999

- **A new direction for computer architecture research** *COMPUTER*
  Kozyrakis, C. E., Patterson, D. A.
  1998; 31 (11): 24-?

- **High-Performance Architectures for Embedded Memory Systems**
  Kozyrakis, C.
  1998

- **Scalable processors in the billion-transistor era: IRAM** *COMPUTER*
  Kozyrakis, C. E., Perissakis, S., PATTERSON, D., ANDERSON, T., Asanovic, K., Cardwell, N., Fromm, R., Golbus, J., Gribstad, B., Keeton, K., Thomas, R., Treuhaft, N., Yelick, et al
  1997; 30 (9): 75-?

- **A case for intelligent RAM** *IEEE MICRO*
  PATTERSON, D., ANDERSON, T., Cardwell, N., Fromm, R., Keeton, K., Kozyrakis, C., Thomas, R., Yelick, K.
  1997; 17 (2): 34-44

- **Evaluation of Existing Architectures in IRAM Systems**
  Bowman, N., Cardwell, N., Kozyrakis, C., Romer, C., Wang, H.
  1997

- **Intelligent RAM (IRAM): the industrial setting, applications, and architectures** *International Conference on Computer Design - VLSI in Computers and Processors (ICCD 97)*
  PATTERSON, D., Asanovic, K., Brown, A., Fromm, R., Golbus, J., Gribstad, B., Keeton, K., Kozyrakis, C., Martin, D., Prissakis, S., Thomas, R., Treuhaft, N., Yelick, et al
  IEEE COMPUTER SOC.1997: 2–7

- **Intelligent RAM (IRAM): Chips that remember and compute** *1997 IEEE International Solid-State Circuits Conference*
  PATTERSON, D., ANDERSON, T., Cardwell, N., Fromm, R., Keeton, K., Kozyrakis, C., Thomas, R., Yelick, K.
  IEEE.1997: 224–225

- **The energy efficiency of IRAM architectures** *24th Annual International Symposium on Computer Architecture*
  Fromm, R., Perissakis, S., Cardwell, N., Kozyrakis, C., McGaughy, B., PATTERSON, D., ANDERSON, T., Yelick, K.
  ASSOC COMPUTING MACHINERY.1997: 327–337

- **Pipelined Multi-Queue Management in a VLSI ATM Switch Chip with Credit-Based Flow-Control**
  Kornaros, G., Kozyrakis, C., Vatsolaki, P., Katevenis, M.
  1997

- **Scalable Processors for the Billion Transistors Era: IRAM** *IEEE Computer*
  Kozyrakis, C., Perissakis, S., Patterson, D., Yelick, K.
  1997; 30 (9): 75-58

- **A Case for Intelligent DRAM: IRAM** *IEEE Micro*
  Patterson, D., Anderson, T., Cardwell, N., Fromm, R., Keeton, K., Kozyrakis, C.
  1997; 17 (2): 33-44

- **Intellingent RAM (IRAM): the Industrial Setting, Applications, and Architectures**
  Patterson, D., Asanovic, K., Brown, A., Fromm, R., Golbus, J., Gribstad, B., Kozyrakis, C.
  1997

- **Intelligent RAM (IRAM): Chips that Compute and Remember**
  Patterson, D., Anderson, T., Cardwell, N., Fromm, R., Keeton, K., Kozyrakis, C.
  1997

- **The Energy Efficiency of IRAM Architectures**

Fromm, R., Perissakis, S., Cardwell, N., Kozyrakis, C., McGaughy, B., Patterson, D.
1997

- **The Architecture, Operation, and Design of the Queue Management Block in the ATLAS I ATM Switch** *Technical Report FORTH-ICS/TR-172, Institute of Computer Science (ICS), Foundation for Research and Technology (FORTH), Heraklion, Crete, Greece*
  Kozyrakis, C., Thesis, B., S.
  1996

- **Plasticine: A Reconfigurable Architecture For Parallel Patterns** *ISCA '17: 44th International Symposium on Computer Architecture, June 2017*
  Prabhakar, R., Zhang, Y., Koeplinger, D., Feldman, M., Zhao, T., Hadjis, S., Pedram, A., Kozyrakis, C., Olukotun, K.
  2017