Anuj Kalia

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Education

2013–present **Ph.D. student in Computer Science**, *Carnegie Mellon University*.
Adviser: Prof. David Andersen

2009–2013 **B.Tech. in Computer Science and Engineering**, *IIT-Delhi*.
GPA – 9.75, 2nd in class

Conference publications

NSDI 2019 Datacenter RPCs can be General and Fast
Anuj Kalia, Michael Kaminsky, and David G. Andersen

ATC 2018, short paper Putting the "Micro" Back in Microservice
Sol Boucher, **Anuj Kalia**, Michael Kaminsky, and David G. Andersen.

OSDI 2016 FaSST: Fast, Scalable, and Simple Distributed Transactions with Two-Sided (RDMA) Datagram RPCs
Anuj Kalia, Michael Kaminsky, and David G. Andersen

ATC 2016 Design Guidelines for High Performance RDMA Systems
Anuj Kalia, Michael Kaminsky, David G. Andersen
Best Student Paper Award. Appears as an invited article in USENIX ;login:.

ISCA 2015 Architecting to Achieve a Billion RPS Throughput on a Single Key-Value Store Server Platform
Sheng Li, Hyeontaek Lim, Victor Lee, Jung Ho Ahn, **Anuj Kalia**, Michael Kaminsky, David Andersen, Seongil O, Sukhan Lee, Pradeep Dubey

NSDI 2015 Raising the Bar for Using GPUs in Software Packet Processing
Anuj Kalia, Dong Zhou, Michael Kaminsky, David G. Andersen

SIGCOMM 2014 Using RDMA Efficiently for Key-Value Services
Anuj Kalia, Michael Kaminsky, David G. Andersen

In preparation

Microsecond-scale Persistent Distributed Systems with Real Persistent Memory
Anuj Kalia, Michael Kaminsky, and David G. Andersen

Short paper A Comparison of CPUs and FPGAs for Database Pattern Matching
Xin Zhang, **Anuj Kalia**, Michael Kaminsky, and David G. Andersen

Journal publications

MICRO Top Picks, 2016 Achieving One Billion Key-Value Requests per Second on a Single Server
Sheng Li, Hyeontaek Lim, Victor Lee, Jung Ho Ahn, **Anuj Kalia**, Michael Kaminsky, David Andersen, Seongil O, Sukhan Lee, Pradeep Dubey

TOCS, 2016 Full-Stack Architecting to Achieve a Billion-Requests-Per-Second Throughput on a Single Key-Value Store Server Platform
Sheng Li, Hyeontaek Lim, Victor Lee, Jung Ho Ahn, **Anuj Kalia**, Michael Kaminsky, David Andersen, Seongil O, Sukhan Lee, Pradeep Dubey

Awards and achievements

2017–2019 Facebook fellowship

2016 Best Student Paper award at USENIX ATC, 2016

2009–2013 Dean's award for academic performance (∼3 in class), in every semester at IIT-Delhi

2010, 2012 OP Jindal Engineering and Management Scholarship, awarded to 1 student from each year at IIT-Delhi

2009 Rank 24 in Indian Institute of Technology Joint Entrance Exam, among around 400,000 students

Teaching experience

Fall 2016 Teaching assistant, Advanced Operating Systems and Distributed Systems, CMU

Spring 2018 Teaching assistant, Parallel Computer Architecture and Programming, CMU

Work experience

Fall 2015 Research Intern, Microsoft Research, Cambridge, UK

Worked with Dushyanth Narayanan to design a physical time–based failure recovery protocol for an erasure-coded distributed transactional object store (FARM)

Summer 2012 Software Engineering Intern, Google India, Hyderabad

Created a framework to generate runtime-configurable MapReduce pipelines to collect custom statistics

Summer 2011 Intern, Imperial College London and Maxeler Technologies

Worked with Prof. Wayne Luk to accelerate AES encryption with Maxeler's FPGA dataflow engines

Summer 2010 Teacher, Vidyamandir Classes, New Delhi

Taught chemistry to high school students

References

David Andersen
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Carnegie Mellon University (CMU)
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Miguel Castro
Principal Researcher,
Microsoft Research, Cambridge
mcastro@microsoft.com

Garth Gibson
Professor,
Computer Science Department,
Carnegie Mellon University (CMU).
President and CEO, Vector Institute
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Michael Kaminsky
Senior Researcher,
Intel Labs, Pittsburgh
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Richard Ulhig
Senior Fellow,
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