

# 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

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## Conference publications

- NSDI 2019 Datacenter RPCs can be General and Fast  
**Anuj Kalia**, Michael Kaminsky, and David G. Andersen  
**Best Paper Award**. Appears as an invited article in USENIX ;login:.
- 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

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## In preparation

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

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## 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

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## Awards and achievements

- 2019 Best Paper award at USENIX NSDI, 2019
- 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