Chinmay Kulkarni

PhD Student, University of Utah

CONTACT

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INTERESTS

Distributed Systems, Caching, Key-Value Stores, Cloud Computing, Virtualization

EDUCATION

University of Utah ..... Salt Lake City, USA
Doctor of Philosophy in Computer Science, Ongoing, Advised by Prof. Ryan Stutsman

PUBLICATIONS

Achieving High Throughput and Elasticity in a Larger-than-Memory Store **PREPRINT**
Chinmay Kulkarni, Badrish Chandramouli, and Ryan Stutsman

Adaptive Placement for In-memory Storage Functions **ATC 2020**
Ankit Bhardwaj, **Chinmay Kulkarni**, and Ryan Stutsman

Splinter: Bare-Metal Extensions for Multi-Tenant Low-Latency Storage **OSDI 2018**
Chinmay Kulkarni, Sara Moore, Mazhar Naqvi, Tian Zhang, Robert Ricci, and Ryan Stutsman

Rocksteady: Fast Migration for Low-latency In-memory Storage **SOSP 2017**
Chinmay Kulkarni, Aniraj Kesavan, Tian Zhang, Robert Ricci, and Ryan Stutsman

OPEN SOURCE SOFTWARE

microsoft/FASTER

vmware/node-replication (Currently under review at VMware)

utah-scs/splinter

EXPERIENCE

Google ..... Salt Lake City, USA
Student Researcher hosted by Larry Kai, August 2020 - Present
Research with Slicer, an application agnostic auto-sharder for stateful services.

Google ..... Sunnyvale, USA
Research Intern hosted by Larry Kai, Summer 2020
Worked on defining and measuring the availability of Google services. Designed and built a dashboard that Google engineers can use to visualize and monitor the availability of their service.

VMware ..... Palo Alto, USA
Research Intern hosted by Gerd Zellweger, Summer 2019
Designed, built, tested and evaluated a Rust library that constructs a highly scalable, linearizable, concurrent data structure from a single threaded implementation.

Microsoft ..... Redmond, USA
Research Intern hosted by Badrish Chandramouli, Summer 2018
Worked on an RPC layer and scale out protocol for FASTER, a key-value store that scales linearly across cores to service 160 million updates per second.

Cisco Systems ..... Bangalore, India
Software Development Engineer, August 2013 - December 2013
Worked with the Core switching - Platforming team. Also involved with the development of the inband, datapath and env components of the Cisco Catalyst 6K series of switches.

SERVICE

HotCloud'20, TKDE'18
External Reviewer

Talks and Posters

Scaling an Operating System to Many Cores Using a System Call Log
SOSP 2019, Huntsville, Ontario, Canada

Raising The Efficiency of μStorage
Google PhD Fellowship Summit 2019, Mountain View, California, USA

Splinter: Bare-Metal Extensions for Multi-Tenant Low-Latency Storage
OSDI 2018, Carlsbad, California, USA

Rocksteady: Fast Migration for Low-latency In-memory Storage
SOSP 2017, Shangai, China

Awards

Google PhD Fellowship
Systems and Networking, 2019