Chinmay Kulkarni (www.chinmayk.net, github.com/chinkulkarni)

INTERESTS	Distributed Systems, 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   **(Under Submission)**

NrOS: Effective Replication and Sharing in an Operating System   **OSDI 2021**
Ankit Bhardwaj, **Chinmay Kulkarni**, Reto Achermann, Irina Calciu, Sanidhya Kashyap, Ryan Stutsman, Amy Tai, and Gerd Zellweger

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

microsoft/FASTER   **vmware/node-replication**   **utah-scs/splinter**

EXPERIENCE

University of Utah . . . . Salt Lake City, USA
Research Assistant advised by Ryan Stutsman, 2016 - Present
Worked on multi-tenant low-latency stores that can be extended at runtime using type- and memory-safe functions, and fast, low impact data migration protocols.

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.

SERVICE

JSys (Student Editor, 2021), **HotCloud'20** (External Reviewer)

TALKS AND POSTERS

Scaling an Operating System to Many Cores Using a System Call Log
SOSP 2019 (Poster), 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, Shanghai, China

Awards   **Google PhD Fellowship**, *Systems and Networking, 2019*

Skills   Rust, Python, R, C++, Kernel-bypass networking, Lock-free programming