

# Chinmay Kulkarni

PhD Student, University of Utah

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CONTACT	School of Computing University of Utah Salt Lake City, Utah 84112, USA	<i>Email:</i> chinmayk@cs.utah.edu <i>Webpage:</i> chinkulkarni.github.io
PUBLICATIONS	<b>Splinter: Bare-Metal Extensions for Multi-Tenant Low-Latency Storage</b> <b>OSDI 2018</b> <b>Chinmay Kulkarni</b> , Sara Moore, Mazhar Naqvi, Tian Zhang, Robert Ricci, and Ryan Stutsman	
	<b>Rocksteady: Fast Migration for Low-latency In-memory Storage</b> <b>SOSP 2017</b> <b>Chinmay Kulkarni</b> , Aniraj Kesavan, Tian Zhang, Robert Ricci, and Ryan Stutsman	
EDUCATION	<b>University of Utah</b> ..... Salt Lake City, USA Doctor of Philosophy in Computer Science, Ongoing Advised by Prof. Ryan Stutsman	
	<b>Indian Institute of Technology</b> ..... Bombay, India Master of Technology in Computer Science, June 2016	
	<b>National Institute of Technology</b> ..... Surathkal, India Bachelor of Technology in Electronics and Communication, May 2013	
RESEARCH	<b>SoFASTER: Scaling Out the FASTER Key-Value Store</b> <i>Microsoft Research and University of Utah, May 2018 - Present</i> Collaborating with Microsoft Research on scaling out FASTER, a key-value store that uses a latch free hash table and a concurrent log-structured record store to service 160 million updates per second. Challenges include maintaining high throughput during scale-up and scale-down operations.	
	<b>Bespín: Scaling an Operating System to Many Cores</b> <i>VMware Research and University of Utah, May 2019 - Present</i> Collaborating with VMware Research on a many-core operating system written in Rust. Our system currently boots on a single core. We are now exploring whether we can apply existing log-based, data structure replication techniques to achieve good many-core operating system scalability.	
	<b>Splinter: Bare-Metal Extensions for Multi-Tenant Low-Latency Storage</b> <i>University of Utah, November 2017 - November 2018</i> Worked on Splinter, a multi-tenant low-latency store that can be extended using type- and memory-safe code written in Rust. Splinter can isolate more than 1000 tenants per server while servicing 3.5 million operations per second with a median latency of 9 microseconds.	
	<b>Rocksteady: Fast Migration for Low-latency In-memory Storage</b> <i>University of Utah, October 2016 - October 2017</i> Designed, implemented, and evaluated Rocksteady, a fast and low impact migration protocol for the RAMCloud in-memory key-value store. Rocksteady can migrate 256 GB of data in less than six minutes while maintaining a tail latency of less than 250 microseconds.	
INDUSTRY	<b>Google</b> ..... Incoming Research Intern, Summer 2020, Sunnyvale, USA	
	<b>VMware Research</b> ..... Research Intern, Summer 2019, Palo Alto, USA	
	<b>Microsoft Research</b> ..... Research Intern, Summer 2018, Redmond, USA	
AWARDS	<b>Google PhD Fellowship</b> <i>Systems and Networking, 2019</i>	