NSDI '16: 13th USENIX Symposium on Networked Systems Design and Implementation March 16–18, 2016 Santa Clara, CA

Message from the Program Co-Chairs vi
Wednesday, March 16, 2016
Network Architectures and Protocols
An Industrial-Scale Software Defined Internet Exchange Point
XFabric: A Reconfigurable In-Rack Network for Rack-Scale Computers
Be Fast, Cheap and in Control with SwitchKV
Bitcoin-NG: A Scalable Blockchain Protocol
Exploring Cross-Application Cellular Traffic Optimization with Baidu TrafficGuard
Content Delivery
Efficiently Delivering Online Services over Integrated Infrastructure
Scalable and Private Media Consumption with Popcorn
Speeding up Web Page Loads with Shandian
Polaris: Faster Page Loads Using Fine-grained Dependency Tracking
CFA: A Practical Prediction System for Video QoE Optimization

Thursday, March 17, 2016

Wireless I
Passive Wi-Fi: Bringing Low Power to Wi-Fi Transmissions
Decimeter-Level Localization with a Single WiFi Access Point
A Scalable Multi-User Uplink for Wi-Fi
BeamSpy: Enabling Robust 60 GHz Links Under Blockage
Flexible Networks
Compiling Path Queries
Simplifying Software-Defined Network Optimization Using SOL
Paving the Way for NFV: Simplifying Middlebox Modifications Using StateAlyzr
Embark: Securely Outsourcing Middleboxes to the Cloud
Dependability and Monitoring
BUZZ: Testing Context-Dependent Policies in Stateful Networks
Minimizing Faulty Executions of Distributed Systems
FlowRadar: A Better NetFlow for Data Centers
Sibyl: A Practical Internet Route Oracle
VAST: A Unified Platform for Interactive Network Forensics

Resource Sharing
Ernest: Efficient Performance Prediction for Large-Scale Advanced Analytics
Cliffhanger: Scaling Performance Cliffs in Web Memory Caches
FairRide: Near-Optimal, Fair Cache Sharing
HUG: Multi-Resource Fairness for Correlated and Elastic Demands
Friday, March 18, 2016
Distributed Systems
Consensus in a Box: Inexpensive Coordination in Hardware
StreamScope: Continuous Reliable Distributed Processing of Big Data Streams
Social Hash: An Assignment Framework for Optimizing Distributed Systems Operations
on Social Networks
The Design and Implementation of the Warp Transactional Filesystem
BlowFish: Dynamic Storage-Performance Tradeoff in Data Stores
In-Network Processing
Universal Packet Scheduling
Maglev: A Fast and Reliable Software Network Load Balancer
Enabling ECN in Multi-Service Multi-Queue Data Centers
DFC: Accelerating String Pattern Matching for Network Applications

Security and Privacy
Diplomat: Using Delegations to Protect Community Repositories
AnonRep: Towards Tracking-Resistant Anonymous Reputation
Mind the Gap: Towards a Backpressure-Based Transport Protocol for the Tor Network
Sieve: Cryptographically Enforced Access Control for User Data in Untrusted Clouds
Earp: Principled Storage, Sharing, and Protection for Mobile Apps
Wireless II
iCellular: Device-Customized Cellular Network Access on Commodity Smartphones
Diamond: Nesting the Data Center Network with Wireless Rings in 3D Space
Ripple II: Faster Communication through Physical Vibration
PhyCloak: Obfuscating Sensing from Communication Signals