# Vaspol Ruamviboonsuk

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### INTERESTS

My primary research interest is in web performance. Currently, I focus on making the web faster while preserving the web security model. I am also interested in other aspects of web performance such as metrics for measuring web performance. In addition, my research interests also include distributed systems, which I have also done some research on wide-area Internet measurements, and distributed storage systems.

#### **EDUCATION**

Ph.D. student in Computer Science and Engineering

Expected 2019

**University of Michigan**, Ann Arbor, MI Advisor: Prof. Harsha V. Madhyastha

M.S. in Computer Science.

2016

University of Michigan, Ann Arbor, MI Advisor: Prof. Harsha V. Madhyastha

B.S. with Honors in Computer Science

2014

University of Washington, Seattle, WA

Advisor: Prof. Richard Ladner

Thesis: DigiTaps: Eyes-free Number Entry Method with Minimal Voice Feedback

#### **PUBLICATIONS**

# Vroom: Accelerating the Mobile Web with Server-Aided Dependency Resolution

Vaspol Ruamviboonsuk, Ravi Netravali, Muhammed Uluyol, and Harsha V. Madhyastha 2017 ACM SIGCOMM, Los Angeles, CA, August 2017

# Demonstration of the Myria big data management service

Daniel Halperin, Victor Teixeira de Almeida, Lee Lee Choo, Shumo Chu, Paraschos Koutris, Dominik Moritz, Jennifer Ortiz, <u>Vaspol Ruamviboonsuk</u>, Jingjing Wang, Andrew Whitaker, Shengliang Xu, Magdalena Balazinska, Bill Howe, and Dan Suciu

2014 ACM SIGMOD international conference on Management of data, Snowbird, UT, November 2014

# Tapulator: A non-visual calculator using natural prefix-free codes

Vaspol Ruamviboonsuk, Shiri Azenkot, and Richard E Ladner

Poster session, the 14th international ACM SIGACCESS conference on Computers and accessibility (AS-SETS 2012), Boulder, CO, October 2012

#### RESEARCH EXPERIENCE

# Improving mobile web performance via aids from web servers

Advisor: Prof. Harsha V. Madhyastha

10/2015 - Present

• Understood the fundamental reasons why web pages are slow and use this knowledge to design a system that leverages recent advances of web optimization techniques such as HTTP/2 PUSH and Link preload headers to reduce web page load time.

# Improving front-end latency to cloud services

Advisor: Prof. Harsha V. Madhyastha

05/2015 - 10/2015

• Analyzed internet measurement data to see patterns of front-end latency degradation and understood how to implement front-end server redirection for the client.

# Numerical input gestures for visually-impaired people

Advisor: Prof. Richard Ladner

2011 - 2014

• Designed special gestures for inputting numbers on smartphones by leveraging multi-touch input surface. [ASSETS'12]

#### Myria, Big Data as a Service

Advisor: Prof. Magdalena Balazinska

2012 - 2014

• Implemented a database operator in the system. [SIGMOD'14]

## TEACHING EXPERIENCE

#### **Graduate Student Instructor**

1/2017 - 4/2017

Department of Computer Science and Engineering, University of Michigan, Ann Arbor, MI

• EECS 498: Introduction to Distributed Systems (Winter 2017)

# Teaching Assistant

9/2012 - 3/2014

Department of Computer Science and Engineering, University of Washington, Seattle, WA

• CSE 344: Introduction to Data Management (Fall 2012, Winter 2013, Winter 2014)

# WORK EXPERIENCE

# Software Engineer Intern

9/2017 - 12/2017

Google Inc. Mountain View, CA

Team: Ads Quality.

# Software Engineer Intern

5/2017 - 8/2017

Google Inc. Seattle, WA

Team: Flywheel. Improve web performance.

#### Graduate Student Research Assistant

5/2015 - Present

Advisor: Prof. Harsha V. Madhyastha.

Electrical Engineering and Computer Science Department, University of Michigan, Ann Arbor, MI

#### Software Developer Engineer in Test Intern

6/2013 - 9/2013

Microsoft. Redmond, WA

Project: Extended Windows Intune test framework to support fuzz testing, developed test modules using the extended features, and incorporated the module as part of the weekly test suite.

#### Software Engineer Intern

6/2012 - 8/2012

Cobalt. Seattle, WA

Project: Designed and developed an internal monitoring tool that periodically aggregates application server logs for checking system health.

#### AWARDS

• 2013 Mary Gates Research Scholarship. University of Washington, Seattle, WA

## **SKILLS**

Most of my work is done in C/C++, Java, and Python, but I am most familiar with Java and Python. I also have some experience working with networking tools such as iptables, and tcpdump. I am also familiar with interacting with android smartphones via ADB.