Keon Jang

Email: keonjang@gmail.com CONTACT

Mobile: +1-650-422-9225

EDUCATION Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea

Ph.D., Computer Science

Advisors: Sue B. Moon and KyoungSoo Park

Mar. $2006 \sim Aug. 2012$

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea

B.S., Computer Science Mar. $2002 \sim \text{Feb. } 2006$

PROFESSIONAL EXPERIENCE

Google Mountain View, CA, USA

Software Engineer Jan. 2016 \sim Present

• Low latency congestion control for datacenters

Intel Labs Santa Clara, CA, USA Research Scientist Nov. 2014 \sim Jan. 2016

• E2: Elastic and extensible framework for NFV applications

• NetBricks: NFV programming framework based on rust

KAIST Daejeon, South Korea Post-Doctoral Researcher Apr. $2014 \sim Oct. 2014$

• BESS (SoftNIC): Software packet processing

• DX: Latency based congestion control for datacenters

Microsoft Research Camridge, UK Mar. $2012 \sim Mar. 2014$

Post-Doctoral Researcher

• Predictable network performance for inter-tenant traffic in the cloud

• Silo: Predictable message latency in the cloud

Microsoft Research Extreme Computing Group (XCG) / Windows Azure

• SSL performance evaluation on Windows server

Research Intern May. $2011 \sim Aug. 2011$

Redmond, WA

KAIST Daejeon, South Korea Research Assistant Mar. $2006 \sim Mar. 2012$

• Network processing acceleration with GPUs

PUBLICATIONS Refereed Conferences

- 1. Inho Cho, Keon Jang, and Dongsu Han. "Credit-Scheduled Delay-Bounded Congestion Control for Datacenters," In SIGCOMM 2017
- 2. Aurojit Panda, Sangjin Han, Keon Jang, Melvin Walls, Sylvia Ratnasamy, and Scott Shenker. "Net-Bricks: Taking the V out of NFV," In OSDI 2016
- 3. Shoumik Palkar, Chang Lan, Sangjin Han, **Keon Jang**, Aurojit Panda, Sylvia Ratnasamy, Luigi Rizzo, and Scott Shenker. "E2: A Framework for NFV Applications," In SOSP 2015
- 4. Keon Jang, Justine Sherry, Hitesh Ballani, and Toby Moncaster. "Silo: Predictable Message Latency in the Cloud," In SIGCOMM 2015
- 5. Changhyun Lee, Chunjong Park, **Keon Jang**, Sue Moon, and Dongsu Han. "Accurate Latency-based Congestion Feedback for Datacenters," In ATC 2015

- Joongi Kim, Keon Jang, Keunhong Lee, Sangwook Ma, Junhyun Shim, and Sue Moon. "NBA (Network Balancing Act): A High-performance Packet Processing Framework for Heterogeneous Processors," In EuroSys 2015
- 7. Hitesh Ballani, **Keon Jang**, Thomas Karagiannis, Changhoon Kim, Dinan Gunawardena, and Greg O'Shea. "Chatty Tenants and the Cloud Network Sharing Problem" In *NSDI 2013*
- 8. **Keon Jang**, Sangjin Han, Seungyeop Han, Sue Moon, and KyoungSoo Park. "SSLShader: Cheap SSL Acceleration with Commodity Processors" In *NSDI 2011*
- 9. Sangjin Han, **Keon Jang**, KyoungSoo Park, and Sue Moon. "PacketShader: A GPU-Accelerated Software Router," In *SIGCOMM 2010*
- 10. DK Lee, **Keon Jang**, Changhyun Lee, Gianluca Iannaccone, and Sue Moon. "Path Stitching: Internetwide Path and Delay Estimation from Existing Measurements," In *INFOCOM Miniconference 2010*
- 11. Mongnam Han, Youngseok Lee, Sue Moon, **Keon Jang**. and Dooyoung Lee, "Evaluation of VoIP Quality over WiBro," In *PAM 2008*

Journals

- 1. Changhyun Lee, Chunjong Park, **Keon Jang**, Sue Moon, and Dongsu Han. "DX: Latency-Based Congestion Control for Datacenters," *IEEE/ACM Transactions on Networking, Vol. 25, Issue 1*, February, 2017, pp.335-348.
- 2. DK Lee, **Keon Jang**, Changhyun Lee, Gianluca Iannaccone, and Sue Moon, "Scalable and Systematic Internet-Wide Path and Delay Estimation from Existing Measurements," *Computer Networks, Vol. 55, Issue 3*, February 21, 2011 pp.836-866.

Workshops

AWARDS

- 1. Joongi Kim, Seonggu Huh, **Keon Jang**, KyoungSoo Park, and Sue Moon. "The Power of Batching in the Click Modular Router," In *APSys* 2012
- 2. Sangjin Han, **Keon Jang**, KyoungSoo Park, and Sue Moon. "Building a 100 Gbps Software Router with Commodity Hardware," In *LANMAN 2010* (invited paper)
- 3. **Keon Jang**, Sangman Kim, Geoffrey M. Voelker, and Sue Moon. "Implementation and Evaluation of a Mobile PlanetLab Node," In *ROADS* 2009
- 4. Shinae Woo, **Keon Jang**, Sangman Kim, Soohyun Cho, Jaehwa Lee, Youngseok Lee, and Sue Moon. "Best-case WiBro Performance for a Single Flow," In *MICNET 2009*
- Keon Jang, Mongnam Han, Soohyun Cho, Hyung-Keun Ryu, Jaehwa Lee, Youngseok Lee, and Sue Moon. "3G and 3.5G Wireless Network Performance Measured from Moving Cars and High-Speed Trains," In MICNET 2009
- 6. DK Lee, **Keon Jang**, Changhyun Lee, Sue Moon, and Gianluca Iannaccone. "Improving Delay Estimation with Path-Stitching," In *CFI* 2008
- 7. **Keon Jang**, Shinae Woo, and Sue Moon. "Design Considerations for a Mobile Testbed," In CFI 2008

SERVICES Program Committee for *HotMiddlebox 2016* and *APNet 2017*

Reviewer for Transactions on Networking and Computer Communication Review

External Reviewer for SIGCOMM 2015 and INFOCOM 2017

EuroSys 2015 Best Student Paper 2015
NVIDIA Graduate Fellowship 2011-2012 2011
ACM SIGCOMM 2010 Best Poster 2010

REFERENCES

Prof. Sue Moon

Professor

Dept. of Computer Science

KAIST

Email: sbmoon@kaist.edu

Dr. David Wetherall

Principal Engineer

Google

Email: wetherall@google.com

Dr. Hitesh Ballani

Principal Researcher

Microsoft Research, Cambridge, UK

Email: hitesh.ballani@microsoft.com

Prof. KyoungSoo Park

Associate Professor Dept. of Electrical Engineering

KAIST

Email: kyoungsoo@ee.kaist.ac.kr

Dr. Nandita Dukkipati

Senior Staff Software Engineer

Google

Email: nanditad@google.com