Gyuyeong Kim

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Reserach Interests

Networked Systems, Data Center Networking, Cloud Computing, Programmable Dataplane, P4 Language

Education

Ph.D. in Computer Science, **Korea University**, Seoul, South Korea   Mar 2012 - Present
Advisor: Prof. Wonjun Lee

B.E. in Brain and Cognitive Sciences, **Korea University**, Seoul, South Korea   Sep 2009 - Feb 2012
Interdisciplinary Major

B.E. in Computer Science, **Korea University**, Seoul, South Korea   Mar 2008 - Feb 2012

Exchange Student in **Lund Tekniska Högskola** (LTH), Lund, Sweden   Jan 2011 - Jun 2011

Research Experience

2017 - 2020 Development of Core Technologies for Programmable Switch in Multi-Service Networks, IITP, South Korea

2013 - 2016 Cloud Bridges-Piers: Optimization Technologies towards Higher Performance of Wireless Networking Cloud, NRF, South Korea

2012 - 2014 A Fair Network Performance Isolation Framework in Multi-Tenancy Cloud Data Center Networks, Global Ph.D. Fellowship, NRF, South Korea

Publications

International Journal Publications

Gyuyeong Kim and Wonjun Lee, "Tardy Flow Scheduling in Data Center Networks," *IEICE Transactions on Information and Systems*, Vol. E99-D, No. 9, pp. 2400-2403, September 2016.

International Conference Publications

Gyuyeong Kim and Wonjun Lee, "Stable Matching with Ties for Cloud-assisted Smart TV Services," in *Proc. of IEEE International Conference on Consumer Electronics (ICCE)*, Las Vegas, NV, January 2014.

Gyuyeong Kim and Wonjun Lee, "Cannot Take My Allocation: Enforcing Fairness by Considering Demand and Payment in Clouds," in *Proc. of The 4th International Conference on Network of the Future (NoF)*, Pohang, South Korea, October 2013.

Gyuyeong Kim, Hoorin Park, Jieun Yu, and Wonjun Lee, "Virtual Machines Placement for Network Isolation in Clouds," in *Proc. of ACM Research in Applied Computation Symposium*, San Antonio, TX, October 2012.

Domestic Conference Publications (in Korean)

Gyuyeong Kim and Wonjun Lee, "Low Latency Switch Buffer Management Policy for Data-intensive Applications," in *Proc. of the 28th Joint Conference on Communications and Information (JCCI)*, Yeosu, Korea, May 2018.

Gyuyeong Kim and Wonjun Lee, "Accelerating Cloud Data Center Packet Transport to Minimize Flow Completion Times," in *Proc. of the 42nd KIISE Winter Conference*, Pyeongchang, Korea, December 2015.

Gyuyeong Kim and Wonjun Lee, "Fault Tolerant Topology Reconfiguration in Optical Wireless Data Center Networks," in *Proc. of the 42nd KIISE Winter Conference*, Pyeongchang, Korea, December 2015.

Taekyung Kim, **Gyuyeong Kim**, and Wonjun Lee, "Suitable Routing Strategy for Wireless Data Centers," in *Proc. of the 40th KIISE Fall Conference*, November 2013.

Gyuyeong Kim and Wonjun Lee, "Strategy Proofness of VM Migration in Cloud Data Centers," in *Proc. of the 40th KIISE Fall Conference*, November 2013.

Gyuyeong Kim, Taekyung Kim, and Wonjun Lee, "Fairness Enforcement by Considering Demand and Payment in Clouds," in *Proc. of KIISE Korea Computer Congress (KCC)*, June 2013.

Gyuyeong Kim and Wonjun Lee, "Pricing for Network Isolation in Clouds," in *Proc. of the 39th KIISE Fall Conference*, November 2012.

Gyuyeong Kim, Jieun Yu, and Wonjun Lee, "Virtual Machines Placement Considering Network Resources in Cloud Data Center Networks," in *Proc. of the 22nd Joint Conference on Communications and Information (JCCI)*, April 2012.

Patents

Gyuyeong Kim and Wonjun Lee, "Method and Device for Scheduling Flow of Packet for Reducing Delay Time Due To Retransmit of Packet," *Korean Patent* 10-1841143, March 16, 2018.

Teaching Experience

Teaching Assistant at **Korea University**

Summer 2018 Computer Networks (IMS2012)

Spring 2018   Computer Networks (IMS301)

Fall 2017   Computer Networks (IMS301)

Fall 2016   Class 43 (CYDF316)

Spring 2016   Class 53 (CYDF321)

Fall 2015   Computer Networks (COSE342)

Spring 2014   Class 31 (CYDF305)

Spring 2013   Wireless Mobile Communications (CNCE407)

Spring 2012   Wireless Mobile Communications (CNCE407)

Work Experience

KLUE (Korea University Lecture Evaluation, `http://klue.kr`)

Jan 2011 - Feb 2015   President

Mar 2010 - Jun 2010   Co-Founder and Junior Developer

Awards and Honors

2016   Cyber-Happiness Idea Competition Special Award

2014   IEEE Seoul Section International Student Paper Contest Bronze Paper Award

2012 - 2014   Global Ph.D. Fellowship (GPF), NRF, South Korea

2009 - 2012   Chung-ho Scholarship, Chung-ho Buddhism Culture Center, South Korea

2009   ACM-ICPC Seoul Regional Contest 10th Place

2009   National Collegiate Programming Contest Silver Prize, South Korea

2009   Oracle JavaFX Software Contest 3rd Prize

2008   ACM-ICPC Seoul Regional Contest Honorable Mentions

References

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