

# Gyuyeong Kim

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## Research Interests

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

## Education

Ph.D. in Computer Science, <b>Korea University</b> , Seoul, South Korea <i>Advisor:</i> Prof. Wonjun Lee	Mar 2012 - Present
B.E. in Brain and Cognitive Sciences, <b>Korea University</b> , Seoul, South Korea Interdisciplinary Major	Sep 2009 - Feb 2012
B.E. in Computer Science, <b>Korea University</b> , Seoul, South Korea	Mar 2008 - Feb 2012
Exchange Student in <b>Lund Tekniska Högskola (LTH)</b> , 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

**Developer** at **KLUE** (Korea University Lecture Evaluation, <http://klue.kr>)

Jan 2011 - Feb 2015   Principal Developer

Mar 2010 - Jun 2010   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

**Wonjun Lee**

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