

**Gyuyeong Kim**  
gykim08@korea.ac.kr  
<https://gyuyeongkim.github.io/>

**RESEARCH  
INTERESTS**

Networked Systems, Data Centers, Cloud Computing, Packet Processing

**EDUCATION**

Ph.D. in Computer Science, **Korea University** Mar. 2012 - Present  
*Advisor: Prof. Wonjun Lee*  
B.E. in Brain and Cognitive Sciences, **Korea University** Sept. 2009 - Feb. 2012  
B.E. in Computer Science, **Korea University** Mar. 2008 - Feb. 2012  
Exchange Student in **Lund Tekniska Högskola (LTH)** Jan. 2011 - Jun. 2011

**RESEARCH  
EXPERIENCE**

**Application-Specialized Network Stack**  
• aSTEAM: App-Specialized Transport for Evolvability, Autonomicity, and Measurability, NRF, PI: *Prof. Wonjun Lee* Oct. 2018 - Present  
**SDN/NFV and Programmable Networks**  
• Development of Core Technologies for Programmable Switch in Multi-Service Networks, IITP, PI: *Prof. Sangheon Park* Jan. 2017 - Present  
**Data Centers and Cloud Computing**  
• Cloud Bridges-Piers: Optimization Technologies towards Higher Performance of Wireless Networking Cloud, NRF, PI: *Prof. Wonjun Lee* Jun. 2013 - May 2016  
• A Fair Network Performance Isolation Framework in Multi-Tenancy Cloud Data Center Networks, **Global Ph.D. Fellowship**, NRF Mar. 2012 - Feb. 2014

**TALKS**

Tutorial: P4 SFC  
**SDN/NFV Forum P4 WG 2019 1st Meetup**, Seoul, South Korea April. 19, 2019  
Service Function Chaining in P4-enabled Programmable Switches  
**SDN/NFV Forum P4 WG 2018 2nd Meetup**, Seoul, South Korea Oct. 12, 2018  
Controller-independent Loss-aware Low Latency State Migration in Network Functions Virtualization  
**ONOS-P4 Brigade Work Days 2017**, Seoul, South Korea Sept. 19, 2017  
Stable Matching with Ties for Cloud-assisted Smart TV Services  
**IEEE ICCE 2014**, Las Vegas, NV Jan. 13, 2014  
Cannot Take My Allocation: Enforcing Fairness by Considering Demand and Payment in Clouds  
**NoF 2013**, Pohang, South Korea Oct. 24, 2013  
Virtual Machines Placement for Network Isolation in Clouds  
**ACM RACS 2012**, San Antonio, TX Oct. 26, 2012

**PUBLICATIONS**

1. **Gyuyeong Kim** and Wonjun Lee, "Absorbing Microbursts without Headroom for Data Center Networks," accepted to *IEEE Communications Letters (CL)*, March 2019.

2. **Gyuyeong Kim** and Wonjun Lee, "Tardy Flow Scheduling in Data Center Networks," *IEICE Transactions on Information and Systems (Trans. Inf.&Syst.)*, Vol. E99-D, No. 9, pp. 2400-2403, September 2016.
3. **Gyuyeong Kim** and Wonjun Lee, "Stable Matching with Ties for Cloud-assisted Smart TV Services," in *Proc. of the 14th IEEE International Conference on Consumer Electronics (ICCE 2014)*, Las Vegas, NV, January 2014.
4. **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 2013)*, Pohang, South Korea, October 2013.
5. **Gyuyeong Kim**, Hoorin Park, Jieun Yu, and Wonjun Lee, "Virtual Machines Placement for Network Isolation in Clouds," in *Proc. of 2012 Research in Applied Computation Symposium (RACS 2012)*, San Antonio, TX, October 2012.

## PATENTS

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

## AWARDS AND HONORS

IEEE Seoul Section International Student Paper Contest Bronze Paper Award 2014  
 - Fault Tolerant Topology Reconfiguration in Optical Wireless Data Center Networks  
**Global Ph.D. Fellowship (GPF)**, NRF, South Korea 2012 - 2014  
 ACM-ICPC Seoul Regional Contest 10th Place 2009  
 National Collegiate Programming Contest Silver Prize, South Korea 2009  
 Oracle JavaFX Software Contest 3rd Prize 2009  
 ACM-ICPC Seoul Regional Contest Honorable Mentions 2008

## WORK EXPERIENCE

**Korea University Lecture Evaluation (KLUE)** <http://klue.kr>  
 - An online service providing course reviews and ratings based on student feedback at Korea University. Roughly 430,000 reviews by 42,000 members are available today  
*President* Jan. 2011 - Feb. 2015  
 - Led our team and managed the service. Maintained the service infrastructure.  
*Co-Founder and Junior developer* Mar. 2010 - Jun. 2010  
 - Designed and developed a part of the service.

## TEACHING EXPERIENCE

**Teaching Assistant**, Korea University  
 Computer Networks (IMS301) Spring 2019  
 Computer Networks (IMS2012) Summer 2018  
 Computer Networks (IMS301) Spring 2018  
 Computer Networks (IMS301) Fall 2017  
 Class 43 (CYDF316) Fall 2016  
 Class 53 (CYDF321) Spring 2016  
 Computer Networks (COSE342) Fall 2015  
 Class 31 (CYDF305) Spring 2014  
 Wireless Mobile Communications (CNCE407) Spring 2013  
 Wireless Mobile Communications (CNCE407) Spring 2012

## REFERENCES

**Wonjun Lee**

Professor, School of Information Security, Korea University  
wlee@korea.ac.kr

Last updated: April 17, 2019