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HYUNJONG JOSEPH LEE

Education

- Ph.D, Computer Science, University of Michigan at Ann Arbor. Current
 Advisor: *Professor Jason Flinn*
- Ph.D, Computer Science, Georgia Institute of Technology. Dropped out; May - Dec 2015
 Advisor: *Professor Karsten Schwan (deceased)*
- B.S., Computer Science, Georgia Institute of Technology. May 2015
 Thesis: *oPsai: Seamless Migration of Remote User Experience to Personal Cloud.*
 GPA: 3.80/4.00, Highest Honor.
- High School Diploma, Allen Academy. May 2013
 GPA: 4.52.

Experience

- EECS, University of Michigan at Ann Arbor, Current
 Graduate research assistant
- Center for Experimental Research in Computer Systems, May 2015 - Dec 2015
 Graduate research assistant in mobile systems & measurements, and edge-cloud.
 Ever-growing performance of mobile devices allows normal users to enjoy diverse types of applications. Regardless of the advances, users are not yet satisfied with their devices. Our research in mobile systems and measurements is centered around identifying hidden bottlenecks in mobile software and hardware and trend over types of applications in mobile ecosystems. Edge-cloud, a resource-rich middlebox locate a hop away from mobile devices, potentially assists those devices to save energy, to augment cloud experience, and to deliver reasonable user-experience.
- Center for Experimental Research in Computer Systems, Aug. 2014 - May 2015
 Undergraduate researcher in edge cloud and mobile systems.
 Mobile context migration among heterogeneous devices, Virtualized sensors in mobile devices and leveraged edge cloud, Developed seamless, as-is cloud migration process in Android system layer, Implemented Personal Cloud agent and utilized cloud resources in mobile devices.
- Network Operations and Internet Security @ Princeton, Apr. 2014 - May 2015
 Undergraduate researcher in mobile network measurement, part of **BISmark**.
 used to be GT-NOISE lab led by Professor *Nick Feamster*.
 Mobile network has grown exponentially in advance of mobile devices. In response to such growth, we conducted network performance and censorship measurement research at the global scale as a branch of BISMark, funded by Google, developing MySpeedTest Android app, lightweight front-end measurement tool.
- Renault-Samsung Motors, Yong-In, South Korea, May - Aug. 2012
 Research assistant intern at Asia research and development center
 Developed data managing program to efficiently handle sensor data in Mobile In Vehicle (MIV) environment, Implemented new MIV concept in next generation smart cars deployed by partner companies (SKT, Mando).
- Texas A&M University, College Station, TX, Feb. - May 2012

Research participant in Virtual Network (VNet) project

Designed and implemented network architecture capable of handling 100 to 300 clients simultaneously, Introduced prototype security control model among high and low priority clients in the network.

NeverStop IT Training Center, Seoul, South Korea

May - Aug. 2009

Teaching assistant

Assisted instructor, taught affiliated partner employees for Cisco Systems.

Teaching, Mentoring

Teaching

Georgia Institute of Technology, Atlanta, Georgia,

Jan. 2015 - Aug. 2015

Teaching Assistant for Graduate Introduction to Operating Systems (GIOS) course taught by Dr. Ada Gavrilovska for Spring & Summer 2015.

Mentoring

Siyuan Sheng [UMich CS undergrad, now master at CMU]

Fall 2016 - Winter 2017

Zihuan Diao [UMich CS undergrad]

Fall 2016

Amit Kalay [UMich CS undergrad]

Summer 2016

Poorvaja Rajagopal [Georgia Tech ECE master, now at Dell]

Fall 2015

Oleg Filatov [Georgia Tech CS undergrad, now at Microsoft]

Summer 2015

William Agnew [Georgia Tech CS undergrad, now Ph.D at UW]

Spring 2015

Publications

Conference

Minsung Jang, **HyunJong Lee**, Karsten Schwan, Ketan Bhardwaj. "SOUL: An Edge-cloud System for Mobile Applications in a Sensor-rich World", *The First IEEE/ACM Symposium on Edge Computing (SEC)*, Washington DC, October 2016.

Workshop

William Agnew, **HyunJong Lee**, Minsung Jang, Ada Gavrilovska, and Karsten Schwan. "Reducing Mobile Throttling from Temperature by Offloading Apps", *Tiny Transactions on Computer Science 4 (TinyTOCS)*, Web.

Minsung Jang, **HyunJong Lee**, Ketan Bhardwaj, Karsten Schwan. "vSensor: Toward Sensor-rich Mobile Applications", *Sensors to Cloud Architectures Workshop (SCAW-2015)*, Held in conjunction with HPCA-21, San Francisco, California, February 2015.

Poster/Demo

HyunJong Lee, Jason Flinn. "Raven: Redundancy Aided Vehicular Networking", *The 15th ACM International Conference on Mobile Systems, Applications, and Services (MobiSys)*, Niagara Falls, NY, June 2017.

HyunJong Lee, Jason Flinn. "Reducing Tail Response Time of Vehicular Applications", *The First IEEE/ACM Symposium on Edge Computing (SEC)*, Washington DC, October 2016.

HyunJong Lee, Minsung Jang, William Agnew, Karsten Schwan, Ada Gavrilovska. "TeSLA: Thermal Service Level Agreement for Mobile Devices", *The Seventeenth Workshop on Mobile Computing Systems and Applications (HotMobile)*, St. Augustine, Florida, February 2016.

Book

HyunJong Lee. *The Introduction to Network Architecture and Design* (in Korean), ISBN# 978896023861, August 2012.

Achievement

<i>Dean's List</i> , awarded five consecutive semesters.	Dec. 2013 - May 2015
<i>IEEE Cisco Network Competition</i> , awarded 5th place.	Jan. 2014
<i>Texas A&M Intelligent CSE Context</i> , awarded 3rd place.	Oct. 2012
<i>Advanced Placement</i> , awarded AP National Scholar.	Sep. 2012
<i>Cisco Systems Inc.</i> , awarded 2nd place in Networking Competition in Asia.	Jul. 2010
<i>CCIE R&S</i> , Cisco Certified Internetworking Expert (CCIE# 25158).	Aug. 2009
<i>CCNP</i> , Cisco Certified Networking Professional.	Aug. 2008
<i>SCJP</i> , certified Java programmer by Sun Microsystems Inc.	Apr. 2008

Grants

<i>Student Travel Grant</i> , The First IEEE/ACM Symposium on Edge Computing (SEC).	Oct. 2016
<i>Student Travel Grant</i> , The 25th ACM Symposium on Operating Systems Principles (SOSP).	Oct. 2015
<i>Student Travel Grant</i> , The Workshop on Supporting Diversity in Systems Research (Diversity).	Oct. 2015

Reference

Available upon request.

Last updated: June 30, 2017