### Minjeong Shin

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### Education

### Master of Science in Computer Science

Daejeon, Korea

KAIST

Mar 2009 - Aug 2011

- Master Thesis: Achieving Bandwidth Guarantees in Virtual Data Centers using the Hose Model
- Examine network traffic data on on-chip network to introduce a new scalable power-efficient structure

### Bachelor of Science in Computer Science

Daejeon, Korea KAIST Mar 2004 - Feb 2009

Interchange student program, Fudan University, Shanghai, China Summer session program, UCSD, San Diego, USA

Sep 2006 - Feb 2007 Jul 2006 - Aug 2006

# Work Experience

### Research Engineer

Australian National University, ACT, Australia

ANU College of Engineering and Computer Science

Sep 2016 - Present

- Visualise knowledge graphs by connecting large collections of images and their descriptions.
- Filter and cluster the extracted media features to automatically generate multimedia event summary documents.

### Junior Research Engineer

LG Electronics, Seoul, Korea

Mar 2011 - May 2015

Creative Innovation Center

- Implement IoT devices for control legacy home appliances and new types of wearable devices.
- Design a new UI/UX platform over Real-time OS and customised Android
- Build interface protocols between devices and smart phone through Bluetooth and Implement a smart phone application that controls the device.

### Research Engineer

LG Electronics, Seoul, Korea

Creative Innovation Center

Aug 2011 - Feb 2013

- Build the interface of touch input sensor for edge-bended phone
- Responsible for developing new gesture dispatch interfaces for Android frameworks and application, as well as writing a device driver and control firmware for the touch input sensors.

### Research Intern

Microsoft Research Asia, Beijing, China

Wireless & Network Group

Aug 2010 - Feb 2011

- Research on the traffic models and topology for data center networks.
- Introduce a new traffic model considering traffic locality to provide bandwidth guarantees.

## Campus Ambassador

Sun Microsystems, Inc., Seoul, Korea

Sun Campus Ambassador

Sep 2008 - Feb 2009

- Organise the second university Java algorithm contest.
- Session translator at Sun Tech Day 2008 Seoul.

## **Engineering Intern**

Naver Corporation, Seoul, Korea

Web-robot Development Team

Mar 2008 - Sep 2008

- Analyse the page url patterns and develop a web page crawler.

### **Publications**

- D. Chen, D. Kim, L. Xie, M. Shin, A. K. Menon, C. S. Ong, I. Avazpour, and J. Grundy. Pathrec: Visual analysis of travel route recommendations. In *Proceedings of the Eleventh ACM Conference on Recommender Systems*, RecSys '17, pages 364–365, New York, NY, USA, 2017. ACM
- 2. J. Lee, H. Kim, M. Shin, J. Kim, and J. Huh. Mutually aware prefetcher and on-chip network designs for multi-cores. *IEEE Transactions on Computers*, 63(9):2316–2329, Sept 2014
- 3. M. Shin and J. Kim. Leveraging torus topology with deadlock recovery for cost-efficient on-chip network. In 2011 IEEE 29th International Conference on Computer Design (ICCD), pages 25–30, Oct 2011
- 4. J. Lee, M. Shin, H. Kim, J. Kim, and J. Huh. Exploiting mutual awareness between prefetchers and on-chip networks in multi-cores. In 2011 International Conference on Parallel Architectures and Compilation Techniques, pages 177–178, Oct 2011
- 5. M. Shin, C. Guo, and J. Kim. Achieving bandwidth guarantees in virtual data centers using the hose model. In *The 3rd USENIX Workshop on Hot Topics in Cloud Computing (HotCloud'11), Poster session*, June 2011

#### Patents

- 1. An insole, A digital device and method for controlling the same (co-inventor), KR 10-2015-0102976
- 2. Mobile terminal and method for controlling the same (co-inventor), KR 10-2015-0093417
- 3. An insole, A mobile terminal and method for controlling the same (co-inventor), KR 10-2015-0082430
- 4. Terminal and method for controlling an output of AV data thereof (co-inventor), KR 10-2014-0021118
- 5. Mobile terminal and method for providing three-dimensional images thereof, KR 10-2014-0021116
- 6. Wearable glass-type device and method of controlling the device (co-inventor), KR 10-2013-0139293
- 7. Mobile terminal, KR 10-2013-0011661
- 8. Routing system and method using torous topology in on-chip network (co-inventor), KR 10-2011-0142500

#### Awards

1. Women in Data Science Award, Data to Decisions CRC, Australia, 2017

#### Skills

Programming: C/C++, Python, JavaScript, Java, XML, SQL, Matlab, Bash, Unix Shell

Operating Systems: RTOS, Android, Linux, Mac OS X, UNIX

Web: Django, HTML, CSS, Bootstrap

**Software and Tool:** NLTK, Scikit, TensorFlow, Git, Gerrit, Atlassian Tools (Jira, Bitbucket, Confluence), Trace32, Gdb, Keil, IAR, Eclipse, Android Studio

System Frameworks / UX architecture Android application communicating with other devices Multithreaded OS structure Device Driver and Firmware Good troubleshooting / problem solving skills