## Minjeong Shin

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## Education

# Ph.D. Candidate in Computer Science

ACT, Australia

Australian National University

Aug 2018 - Present

- Research interest: Visual analytics, Human-centered computing, Big data visualisation

## 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

Daeieon, 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

Creative Innovation Center

LG Electronics, Seoul, Korea

- Build the interface of touch input sensor for edge-bended phone

Aug 2011 - Feb 2013

- 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**

- 1. M. Shin, A. Soen, B. T. Readshaw, S. M. Blackburn, M. Whitelaw, and L. Xie. Influence flowers of academic entities. In *The IEEE Conference on Visual Analytics Science and Technology (VAST)*, 2019
- 2. E. Berger, S. M. Blackburn, C. Brodley, H. V. Jagadish, K. S. McKinley, M. A. Nascimento, M. Shin, K. Wang, and L. Xie. Goto rankings considered helpful. *Commun. ACM*, 62(7), 2019
- 3. M. Shin, D. Kim, J. H. Lee, U. Bista, and L. Xie. Visualizing graph differences from social media streams. In *The ACM International Conference on Web Search and Data Mining (WSDM)*, Demo, 2019
- 4. U. Bista, A. P. Mathews, M. Shin, A. K. Menon, and L. Xie. Comparative document summarisation via classification. In *The AAAI Conference on Artificial Intelligence (AAAI)*, 2019
- 5. 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 *The ACM Conference on Recommender Systems (RecSys)*, *Demo*, 2017
- 6. J. Lee, H. Kim, M. Shin, J. Kim, and J. Huh. Mutually aware prefetcher and on-chip network designs for multi-cores. *IEEE Trans. Computers*, 63(9), 2014
- 7. M. Shin and J. Kim. Leveraging torus topology with deadlock recovery for cost-efficient on-chip network. In *The IEEE International Conference on Computer Design (ICCD)*, 2011
- 8. J. Lee, M. Shin, H. Kim, J. Kim, and J. Huh. Exploiting mutual awareness between prefetchers and on-chip networks in multi-cores. In *The International Conference on Parallel Architectures and Compilation Techniques (PACT)*, 2011
- 9. M. Shin, C. Guo, and J. Kim. Achieving bandwidth guarantees in virtual data centers using the hose model. In *The USENIX Workshop on Hot Topics in Cloud Computing (HotCloud)*, Poster, 2011

## Patents

- 1. An insole, A digital device and method for controlling the same (co-inventor), KR1020150102976
- 2. Mobile terminal and method for controlling the same (co-inventor), KR1020150093417
- 3. Insole, mobile terminal and method of controlling therefor (co-inventor), US20160366266A1
- 4. An insole, A mobile terminal and method for controlling the same (co-inventor), KR1020150082430
- 5. Terminal and method for controlling an output of AV data thereof (co-inventor), KR1020140021118
- 6. Mobile terminal and method for providing three-dimensional images thereof, KR1020140021116
- 7. Wearable glass-type device and method of controlling the device (co-inventor), KR1020130139293
- 8. Mobile terminal, KR1020130011661
- 9. Routing system and method using torous topology in on-chip network (co-inventor), KR1020110142500

#### Awards

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

## Skills

Programming: Python, JavaScript, C/C++, R, Java, 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