

Juheon Yi

johnyi0606@snu.ac.kr | <https://juheonyi.github.io>

RESEARCH INTERESTS

- Mixed Reality (MR)
- Mobile/embedded deep learning systems
- Mobile computing

EDUCATION

Seoul National University **Seoul, Korea**
Ph.D. in Computer Science and Engineering (Advisor: Prof. Youngki Lee) *Sep 2020 – Present*

Seoul National University **Seoul, Korea**
M.S. in Electrical and Computer Engineering (Advisor: Prof. Sunghyun Choi) *Sep 2016 – Aug 2018*

Seoul National University **Seoul, Korea**
B.S. in Electrical and Computer Engineering *Mar 2012 – Aug 2016*

WORK EXPERIENCE

Nokia Bell Labs **Cambridge, United Kingdom**
Researcher Intern *Sep 2021 – Dec. 2021*

Institute of Computer Technology, Seoul National University **Seoul, Korea**
Researcher, as part of the alternative military service *Jun 2020 – Aug. 2020*

Institute of New Media and Communications, Seoul National University **Seoul, Korea**
Researcher, as part of the alternative military service *Sep 2018 – May 2020*

HONORS AND AWARDS

- Ph.D. Research Encouragement Funding 2021, National Research Foundation of Korea.
- \$18K funding for research on “Low-Power Mobile Deep Learning System for Multi-Modal Immersive Media Applications”
- Microsoft Research Asia Ph.D. Fellowship 2020
- Awarded to top 12 Ph.D. students in the Asia-Pacific region
- Honorable mention, AI Star Fellowship 2020, AI Institute of Seoul National University (AIIS)
- Presidential Science Scholarship, Korea Student Aid Foundation (KOSAF), 2012-2016
- Awarded to top 100 freshmen in Korea

PUBLICATIONS

Conference

- [ACM MobiCom 2020] **Juheon Yi** and Youngki Lee, “Heimdall: Mobile GPU Coordination Platform for Augmented Reality Applications,” ACM International Conference on Mobile Computing and Networking 2020.
(Acceptance rate: 17.8% = 39/218, winter round)
- [ACM MobiCom 2020] Kyungjin Lee, **Juheon Yi**, Youngki Lee, Sunghyun Choi, and Young Min Kim, “GROOT: A Real-time Streaming System for High-Fidelity Volumetric Videos,” ACM

International Conference on Mobile Computing and Networking 2020.
(Acceptance rate: 17.8% = 39/218, winter round)

- [ACM MobiCom 2020] **Juheon Yi**, Sunghyun Choi, and Youngki Lee, "EagleEye: Wearable Camera-based Person Identification in Crowded Urban Spaces," ACM International Conference on Mobile Computing and Networking 2020.
(Acceptance rate: 17.2% = 24/139, summer round)
- [IEEE SECON 2018] **Juheon Yi**, Weiping Sun, Jonghoe Koo, Seongho Byeon, Jaehyuk Choi, and Sunghyun Choi, "BlueScan: Boosting Wi-Fi Scanning Efficiency Using Bluetooth Radio," IEEE International Conference on Sensing, Communication and Networking 2018.
(Acceptance rate: 23.2% = 49/211)
- [ACM Multimedia 2017] Jonghoe Koo, **Juheon Yi**, Joongheon Kim, Mohammad A. Hoque, and Sunghyun Choi, "REQUEST: Seamless Dynamic Adaptive Streaming over HTTP for Multi-Homed Smartphone under Resource Constraints," ACM Multimedia 2017.
(Acceptance rate: 28.3% = 191/675)

Journal

- [IEEE TMC 2020] **Juheon Yi**, Seongwon Kim, Joongheon Kim, and Sunghyun Choi, "Supremo: Cloud-Assisted Low-Latency Super-Resolution in Mobile Devices," accepted to IEEE Transactions on Mobile Computing, September 2020.
- [IEEE TMC 2019] Jonghoe Koo, **Juheon Yi**, Joongheon Kim, Mohammad A. Hoque, and Sunghyun Choi, "Seamless Dynamic Adaptive Streaming in LTE/Wi-Fi Integrated Network under Smartphone Resource Constraints," IEEE Transactions on Mobile Computing, July 2019.

PROFESSIONAL SERVICES

Reviewer

- Journal
 - IEEE Transactions on Mobile Computing (TMC)
 - ACM Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)
- Conference
 - IEEE WCNC 2019, 2020
 - IEEE DySPAN 2018

INVITED TALKS

- Electronic & Information Research Information Center (EIRIC) Seminar *Mar. 2021*
 - Title: "Mobile Deep Learning Platform for Mixed Reality"
- A3 Foresight Workshop on Intelligent IoT for Empowering the People's Lifestyle and Well-being *Jan. 2021*
 - Title: "Mobile Deep Learning Platform for Mixed Reality"

TEACHING EXPERIENCE

- SNU M1522.003300 Mobile and Ubiquitous Computing, Spring 2021
- SNU 4190.406B Mobile Systems and Applications, Fall 2020
- SNU M2608.001200 Introduction to Data Communication Network, Fall 2017
- SNU 033.017 Basic Calculus 2, Fall 2014
- SNU 033.016 Basic Calculus 1, Spring 2014