

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 Ph.D. in Computer Science and Engineering (Advisor: Prof. Youngki Lee) | Seoul, Korea <i>Sep 2020 – Present</i> |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------|

| | |
|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Seoul National University M.S. in Electrical and Computer Engineering (Advisor: Prof. Sunghyun Choi) | Seoul, Korea <i>Sep 2016 – Aug 2018</i> |
|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------|

| | |
|---------------------------------------------------------------------------------|---------------------------------------------------|
| Seoul National University B.S. in Electrical and Computer Engineering | Seoul, Korea <i>Mar 2012 – Aug 2016</i> |
|---------------------------------------------------------------------------------|---------------------------------------------------|

WORK EXPERIENCE

| | |
|---------------------------------------------|-----------------------------------------------------------------|
| Nokia Bell Labs Researcher Intern | Cambridge, United Kingdom <i>Sep 2021 – Dec. 2021</i> |
|---------------------------------------------|-----------------------------------------------------------------|

| | |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Institute of Computer Technology, Seoul National University Researcher, as part of the alternative military service | Seoul, Korea <i>Jun 2020 – Aug. 2020</i> |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|

| | |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Institute of New Media and Communications, Seoul National University Researcher, as part of the alternative military service | Seoul, Korea <i>Sep 2018 – May 2020</i> |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|

HONORS AND AWARDS

- 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 TMC, ACM IMWUT
- Conference: IEEE DySPAN 2018, IEEE WCNC 2019, IEEE WCNC 2020

INVITED TALKS

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