JINGYU LEE

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EDUCATION

Seoul National University — *Mar 2020 - Present*
Ph.D. Student in Computer Science and Engineering *(Advisor: Youngki Lee)* — *Seoul, Republic of Korea*

Seoul National University — *Mar 2018 - Feb 2020*
M.S. in Computer Science and Engineering *(Advisor: Yeong-Gil Shin)* — *Seoul, Republic of Korea*

DigiPen Institute of Technology — *Mar 2012 - Apr 2016*
B.S. in Computer Science in Real-Time Interactive Simulation — *Redmond, Washington, USA*

WORK EXPERIENCE

Microsoft Research Asia — *Dec 2020 - May 2021*
Research Intern - Heterogeneous and Extreme Computing (HEX) Group — *Beijing, China (Virtual)*
(Advisor: Yunxin Liu and Ting Cao)

Microsoft — *Sep 2016 - May 2017*
Contracted Software Engineer - Minecraft: Education Edition Team — *Redmond, Washington, USA*

PUBLICATION (CONFERENCE & WORKSHOP)

Loss-tolerant Live Video Analytics System
Kichang Yang, Minkyung Jeong, Juheon Yi, **Jingyu Lee**, Kyungsoo Park, Youngki Lee
ACM International Conference on Mobile Computing and Networking (MobiCom) — *Nov 2024*

Maestro: The Analysis-Simulation Integrated Framework for Mixed Reality
Jingyu Lee, Hyunsoo Kim, Minjae Kim, Byung-Gon Chun, Youngki Lee
ACM International Conference on Mobile Systems, Applications, and Services (MobiSys) [DOI] — *June 2024*

Band: Coordinated Multi-DNN Inference on Heterogeneous Mobile Processors
Joo Seong Jeong†, **Jingyu Lee**†, Donghyun Kim, Changmin Jeon, Changjin Jeong, Youngki Lee, Byung-Gon Chun
(† Both authors contributed equally to the paper)
ACM International Conference on Mobile Systems, Applications, and Services (MobiSys) [DOI] — *June 2022*

ParallelFusion: Towards Maximum Utilization of Mobile GPU for DNN Inference
Jingyu Lee, Yunxin Liu, Youngki Lee
International Workshop on Embedded and Mobile Deep Learning (in conjunction with MobiSys) [DOI] — *June 2021*

PUBLICATION (JOURNAL)

Liver Segmentation in Abdominal CT Images via Auto-Context Neural Network and Self-supervised Contour Attention
Minyoung Chung, **Jingyu Lee**, Jeongjin Lee*, Yeong-Gil Shin
Artificial Intelligence in Medicine [DOI] — *Mar 2021*

Automatic Registration between Cone-Beam CT and Scanned Surface via Deep-Pose Regression Neural Networks and Clustered Similarities
Minyoung Chung, **Jingyu Lee**, Wisoo Song, Youngchan Song, Il-Hyung Yang, Jeongjin Lee*, Yeong-Gil Shin
IEEE Transactions on Medical Imaging [DOI] — *Dec 2020*

Deeply Self-Supervised Contour Embedded Neural Network Applied to Liver Segmentation
Minyoung Chung, **Jingyu Lee**, Minkyung Lee, Jeongjin Lee*, Yeong-Gil Shin
Computer Methods and Programs in Biomedicine [DOI] — *Aug 2020*

Pose-Aware Instance Segmentation Framework from Cone Beam CT Images for Tooth Segmentation
Minyoung Chung, Minkyung Lee, Jioh Hong, Sanguk Park, Jusang Lee, **Jingyu Lee**, Il-Hyung Yang, Jeongjin Lee*, Yeong-Gil Shin
Computers in Biology and Medicine [DOI] — *May 2020*

PROJECT

Band: Multi-DNN Framework for Mobile-Cloud Platform
Project Lead [github] [Unreal Engine plugin] [examples]

Somnus *Sep 2015 - Apr 2016*
Technical Director *(Team of 4 Programmers, 1 Designer, 4 Artists, 3 Sound Designers)*
3D Puzzle Platformer that utilizes perspective illusions to manipulate the environment [link]

HONORS & AWARD

E3 College Game Competition - Somnus *Jun 2016*
Finalist(top 5) [link]

Bisa Scholarship *Mar 2012*
Merit-based full Scholarship granted from DigiPen—KMU Dual Degree Program

INVITED TALK

KAIST School of Computing *Sep 2023*
Band: Coordinated Multi-DNN Inference on Heterogeneous Mobile Processors
(Host: Junehwa Song)

Samsung Global Technology Symposium – Poster *Apr 2023*
Band: Coordinated Multi-DNN Inference on Heterogeneous Mobile Processors

Institute of Embedded Engineering of Korea Fall Conference Proceedings *Nov 2022*
Band: Coordinated Multi-DNN Inference on Heterogeneous Mobile Processors [link]

A3 Foresight Workshop *Aug 2021*
ParallelFusion: Towards Maximum Utilization of Mobile GPU for DNN Inference [link]

ACADEMIC SERVICE

IEEE Transactions on Medical Imaging
Reviewer