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Jeho Lee

Ph.D. Student
Department of Computer Science and Engineering, Yonsei University
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Research Interests

- **Mobile Edge AI Systems**

  resource-efficient on-device AI, edge-cloud collaborative AI

- **Application-oriented AI System Design**

  3D perception, vision-language modeling, immersive computing (AR/MR, volumetric content streaming)

Education

Yonsei University, Seoul, Korea Mar 2020 – Present
Ph.D. Student in Computer Science (Advisor: Hojung Cha)

Ajou University, Suwon, Korea Mar 2015 – Feb 2020
B.S. in Computer Engineering *GPA: 4.0/4.5*

Publications

Panopticus: Omnidirectional 3D Object Detection on Resource-constrained Edge Devices
Jeho Lee, Chanyoung Jung, Jiwon Kim, Hojung Cha
ACM International Conference on Mobile Computing and Networking (MobiCom 2024)

Vulture: Cross-Device Web Experience with Fine-Grained Graphical User Interface Distribution
Seonghoon Park, **Jeho Lee**, Yonghun Choi, Hojung Cha
IEEE Conference on Computer Communications (INFOCOM 2024)

OmniLive: Super-Resolution Enhanced 360° Video Live Streaming for Mobile Devices
Seonghoon Park, Yeonwoo Cho, Hyungchol Jun, **Jeho Lee**, Hojung Cha
ACM International Conference on Mobile Systems, Applications and Services (MobiSys 2023)

Crow API: Cross-device I/O Sharing in Web Applications
Seonghoon Park, **Jeho Lee**, Hojung Cha
IEEE Conference on Computer Communications (INFOCOM 2023)

MAUI: Model-driven Development Tool for Usability-enhanced Web Interaction Techniques
Jeho Lee, Seonghoon Park, Yoonha Cha, Hojung Cha
Under Review, IEEE Transactions on Human-Machine Systems (THMS)

Experience

University of Southern California, Los Angeles, USA Aug 2023
Visiting Student – Viterbi School of Engineering

CSIRO, Pulenvale, Australia Jul 2019 – Aug 2019
Research Intern – Data61 Robotics and Autonomous Systems Group

Projects

Development of On-device DNN Inference System for Real-time 3D Perception with Mobile 360-degree Camera (Primary Student Researcher) May 2024 – Present
Mid-Career Researcher Program Supported by National Research Foundation of Korea (NRF)

Panoptic3D: Omnidirectional 3D Perception Testbed and Dataset (Project Leader)

Skills

Programming: Python, C/C++, Java, JavaScript
Languages: Korean (Native), English (Intermediate)
Frameworks: PyTorch, TensorRT, MMDetection3D, ROS, Android, Node.js

Teaching Experience

Teaching Assistant, Yonsei University Spring 2023
Operating Systems (CSI3101)

Teaching Assistant, Yonsei University Fall 2022
Introduction to Computer Science (CSI2106)