# Jeho Lee

Ph.D. Candidate

Department of Computer Science and Engineering, Yonsei University Seoul, Republic of Korea

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### RESEARCH INTERESTS

- On-device AI
- Mobile and Edge Computing Systems

## 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**

## Conference and Journal Publications (\*Co-first authors)

# ARIA: Optimizing Vision Foundation Model Inference on Heterogeneous Mobile Processors for Augmented Reality

Chanyoung Jung\*, <u>Jeho Lee</u>\*, Gunjoong Kim, Jiwon Kim, Seonghoon Park, Hojung Cha ACM International Conference on Mobile Systems, Applications and Services (MobiSys 2025)

## 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, <u>Jeho Lee</u>, 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: Enhancing Assistive Web Interaction through GUI Abstraction

Jeho Lee, Seonghoon Park, Yoonha Cha, Hojung Cha

Under Review, IEEE Transactions on Human-Machine Systems (THMS)

#### Other Publications

## Poster: Mixture of Class-aware Experts for Efficient AIoT Inference

Hyemin Jeong, Jeho Lee, Seunghyeok Jeon, Hojung Cha

ACM International Conference on Mobile Systems, Applications and Services (MobiSys 2025)

## EXPERIENCE

University of Southern California, Los Angeles, USA

Visiting Student – Viterbi School of Engineering

CSIRO, Pulenvale, Australia

Research Intern – Data61 Robotics and Autonomous Systems Group

Summer 2019

Summer 2023

**PROJECTS** 

Development of On-device DNN Inference System for Real-time 3D Perception with Mobile 360-degree Camera

300-degree Camera

National Research Foundation of Korea (NRF)

May 2024 – Present

Task Relation Graph Prediction based on RNN

Samsung Electronics, Republic of Korea

Mar 2023 – Feb 2024

SKILLS

**Programming**: Python, C/C++, Java, JavaScript **Languages**: Korean (Native), English (Intermediate)

Frameworks: Android, QNN, TensorRT, PyTorch, MMDetection3D, ROS, Node.js

TEACHING EXPERIENCE

Guest Lecturer, Yonsei University

Spring 2024

On-Device Intelligence for 3D Perception: Challenges and Innovations

Teaching Assistant, Yonsei University

Spring 2023

Operating Systems (CSI3101)

Teaching Assistant, Yonsei University

Introduction to Computer Science (CSI2106)

Fall 2022

MENTORING EXPERIENCE

Hyemin Jeong, Master student at Yonsei Univ., a MobiSys 2025 poster

2025 - Present

Chanyoung Jung, Master student at Yonsei Univ., a MobiSys 2025 paper

2024 - Present

Chanyoung Jung, Undergraduate student at Yonsei Univ., a MobiCom 2024 paper

2022 - 2023

Software Capstone Design, Yonsei Univ.

Spring 2021, Fall 2021, Spring 2022, Spring 2023, Fall 2023

ACADEMIC SERVICES

Student Volunteer, MobiSys 2024