# **CHANGMIN JEON**

wisechang1@snu.ac.kr \( \phi \) changminjeon.com Seoul, Republic of Korea

## RESEARCH INTERESTS

On-Device AI Systems, Scene Understanding for XR Applications, DNN with Synthetic Data

#### **EDUCATION**

Seoul National University

Ph.D. Student in Computer Science and Engineering (Advisor: Youngki Lee)

Seoul National University

B.S. in Computer Science and Engineering

Seoul National University

B.S. in Mechanical Engineering

Mar 2020 - Present

Seoul, Republic of Korea

Mar 2014 - Feb 2020

Seoul, Republic of Korea

Mar 2014 - Feb 2020

Seoul, Republic of Korea

## **PUBLICATIONS**

# Band: Coordinated Multi-DNN Inference on Heterogeneous Mobile Processors

Joo Seong Jeong\*, Jingyu Lee\*, Donghyun Kim, **Changmin Jeon**, Changjin Jeong, Youngki Lee and Byung-Gon Chun (\* Both authors contributed equally to the paper)

20th ACM International Conference on Mobile Systems, Applications, and Services (MobiSys)

June 2022

Aug 2023 - Present

Mar 2023 - Present

### RESEARCH PROJECTS

# Hand-Object Tracking

Changmin Jeon, Dongho Han and Youngki Lee

A real-time mobile hand-object tracking system for XR applications

FallSim: Accurate Fall Detection with Synthesized Fall Motions

Hyunwoo Jung, Jungnam Park, Taeho Kang, Changmin Jeon and Youngki Lee

Robust real-world fall detection with synthesized fall motions

Mondrian: Edge-Enabled High-Performance Video Analytics with Compressive Packed Inference Aug 2023

Changmin Jeon\*, Seonjun Kim, Juheon Yi and Youngki Lee

On-device high-throughput multi-camera video analytics with compressive packed inference

Band: Coordinated Multi-DNN Inference on Heterogeneous Mobile Processors

Jun 2022

Joo Seong Jeong\*, Jingyu Lee\*, Donghyun Kim, **Changmin Jeon**, Changjin Jeong, Youngki Lee and Byung-Gon Chun Multi-DNN inference platform for heterogeneous mobile processors with subgraph-level scheduling

VSense: Enabling Activity Recognition with Virtual Reality

Hyunwoo Jung\*, Changmin Jeon\*, Inseok Hwang and Youngki Lee

Real-world activity recognition applications with generated virtual IMU data

Mar 2020

# **GRANTS**

National Science & Technology Scholarship (\$24000)

Mar 2014 - Feb 2020

# HONORS & AWARD

Best Teaching Assistant

Mar 2023

#### **SKILLS**

# **Programming Languages**

C++, Python, Java, C, Rust, Kotlin

### Familiar Softwares

Mobile Deep Learning Frameworks (e.g., TFLite, MNN) TensorFlow, PyTorch, OpenCV, Android SDK, Unity

### ACADEMIC SERVICES

IMWUT 2022 (May 2022 round)

External Reviewer

#### TEACHING ASSISTANT

# SNU & LG Data Science Course: Machine Learning

Jan 2024 / Jan 2023 / Jan 2022 / Jan 2021 / Feb 2020

Machine learning theory and practice with An Introduction to Statistical Learning

### SNU & Samsung Data Science Course: Machine Learning

Jul 2023 / Mar 2023 / Mar 2022 / Aug 2021 / Feb 2021 / Aug 2020 / Feb 2020 Machine learning theory and practice with An Introduction to Statistical Learning

# SNU & Samsung Data Science Course: Machine Learning Projects

Machine learning projects with Kaggle

Oct 2023 / Jun 2023

### SNU & SK Hynix ML Engineer Course: Time Series Data Analysis

Linear & non-linear models, hidden markov model, filtering methods, and deep learning models

# Aug 2022 / Nov 2022

# SNU Big Data & Fintech Expert Training Course: Fintech Industry Application

Mobile deep learning & machine learning application development

# Apr~2021

## SNU Computer Programming (M1522.000600)

Object oriented programming in java & C++

# Fall 2020

# SNU Mobile and Ubiquitous Computing (M1522.003300)

Activity recognition, localization, health care, power optimization, cloud and edge systems

## Spring 2020

### WORK EXPERIENCE

# **EQUALKEY**

Software development intern

Knowledge Graph Generation, Educational Game Development

# Dec 2018 - Feb 2019 Republic of Korea

# Republic of Korea Army

Military Service

# May 2016 - Feb 2018 Republic of Korea