

# Jihwan Bang

## ML Research Engineer @ Naver Clova AI Vision Team

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## Education

### M. S., School of Electrical Engineering

Korea Advanced Institute of Science and Technology (KAIST)

📅 Mar 2017 - Feb 2019

📍 Daejeon, South Korea

### B. S., School of Electrical Engineering

Korea Advanced Institute of Science and Technology (KAIST)

📅 Mar 2012 - Feb 2017

📍 Daejeon, South Korea

## Research Interests

**Data AI:** Active Learning (AL), Continual Learning (CL)

**Vision AI:** Face Recognition, Face Anti-spoofing, Portrait Segmentation, General Vision Model

**Others:** Reinforcement Learning for Autonomous UAV Control, Military Networks.

## Work Experience

### Naver Clova

AI Research Engineer at Clova AI Team

📅 Mar 2019 - present

📍 Seongnam, South Korea

- Research on Active Learning (AL) and Continual Learning (CL).
- Build face recognition and anti-spoofing models.
- Build data labelling pipeline using AL to reduce labelling cost.

## Publications

### Conferences Published

- C1. **Jihwan Bang\***, Heesu Kim\*, YoungJoon Yoo, Jung-Woo Ha and Jonghyun Choi, “*Rainbow Memory: Continual Learning with a Memory of Diverse Samples*”, CVPR, 2021.
- C2. Hyojin Park, Lars Sjosund, YoungJoon Yoo, Nicolas Monet, **Jihwan Bang** and Nojun Kwak, “*Sinet: Extreme lightweight portrait segmentation networks with spatial squeeze module and information blocking decoder*”, WACV, 2020.
- C3. Hoyong Choi, **Jihwan Bang**, Namjo Ahn, Jinhwan Jung, Jungwook Choi, Soobum Park and Yung Yi, “*CH-MAC: A Cluster-based, Hybrid TDMA MAC Protocol over Wireless Ad-hoc Networks*”, MILCOM, 2020.
- C4. Hyojung Lee, **Jihwan Bang** and Yung Yi, “*Incentivizing hosts via multilateral cooperation in user-provided networks: A fluid shapley value approach*”, Mobihoc, 2018.

### Arxiv

- A1. **Jihwan Bang\***, Heesu Kim\*, YoungJoon Yoo and Jung-Woo Ha, “*Boosting Active Learning for Speech Recognition with Noisy Pseudo-labeled Samples*”, arXiv, 2020.
- A1. Hyojin Park, Lars Lowe Sjöstrand, YoungJoon Yoo, **Jihwan Bang** and Nojun Kwak, “*ExtremeC3Net: Extreme Lightweight Portrait Segmentation Networks using Advanced C3-modules*”, arXiv, 2019.

**MISC:** Domestic publications

- M1. Daewoo Kim, Wan Ju Kang, Yoon-pyo Koo, **Jihwan Bang**, Kyung-hwan Son, David Hostallero, Se-eun Yoon, Hyun-ho Yeo, Jae-hyeong Ha, Nansol Seo, Dongsu Han and Yung Yi, *"AI-Based Drone Object Tracking System: Design and Implementation"*, The Journal of Korean Institute of Communications and Information Sciences, 2017.
- M2. Kyung-hwan Son, David Hostallero, Daewoo Kim, **Jihwan Bang**, Wan Ju Kang, Se-eun Yoon, Yoon-pyo Koo, Hyun-ho Yeo, Jae-hyeong Ha, Nansol Seo, Dongsu Han and Yung Yi, *"On the Efficiency of Running Machine Learning Tasks for Drone-Based Target Tracking : Cloud-Based vs. Drone-Based"*, The Journal of Korean Institute of Communications and Information Sciences, 2018.
- M3. Yoonpyo Koo, **Jihwan Bang**, Kyung-hwan Son, Suho Shin, Sumyeong Ahn, Yung Yi, Junghoon Yoo and Jaeshin Kim, *"An Implementation of Multi-hop Voice Communication System Using Drones"*, The Conference of Korean Institute of Communications and Information Sciences, 2017.

## Patents

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- P1. **Jihwan Bang**\*, Heesu Kim\*, Yeongjoon Yoo and Jung-Woo Ha, "Method and system for training speech recognition models using augmented consistency regularization, " *Korea, Patent Application Number: 10-2020-0111929*, Sep 2, 2020.

## Reference Available on Request

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