

# Kanghyun Choi

Accelerated Computing Systems Lab  
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## RESEARCH INTERESTS

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*Neural Architecture Search, Data-free Neural Network Compression, Generative Adversarial Network*

## EDUCATION

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- **Yonsei University** Seoul, Korea  
*Integrated Course of Masters and Ph.D.* *September 2020 - Present*
- **Yonsei University** Seoul, Korea  
*B.S. in Computer Science, GPA 3.81/4.3* *March 2016 - August 2020*
- **American University** Washington D.C., USA  
*Study Abroad Program, Computer Science* *January 2019 - May 2019*

## PUBLICATIONS

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**Kanghyun Choi**, Hyeyoon Lee, Deokki Hong, Joonsang Yu, Noseong Park, Youngsok Kim, Jinho Lee, “It’s All In the Teacher: Zero-Shot Quantization Brought Closer to the Teacher”, CVPR 2022, **Oral presentation** (To Appear)

Deokki Hong, **Kanghyun Choi**, Hyeyoon Lee, Joonsang Yu, Noseong Park, Youngsok Kim, Jinho Lee, “Enabling Hard Constraints in Differentiable Neural Network and Accelerator Co-Exploration”, DAC 2022 (To Appear)

**Kanghyun Choi**, Deokki Hong, Noseong Park, Youngsok Kim, Jinho Lee, “Qimera: Data-free Quantization with Synthetic Boundary Supporting Samples”, NeurIPS 2021

**Kanghyun Choi**<sup>1</sup>, Deokki Hong<sup>1</sup>, Hojae Yoon<sup>1</sup>, Joonsang Yu, Youngsok Kim, Jinho Lee, “DANCE: Differentiable Accelerator/Network Co-Exploration”, DAC 2021

## PROJECTS

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- **High-resolution Face Image Generation by Transformer-based GAN** *2021-2022*  
*Electronics and Telecommunications Research Institute (ETRI)*
- **Fast Distributed Deep Neural Network Training** *2020*  
*Korea Institute of Industrial Technology (KITECH)*

## AWARDS

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- **The 28th Samsung Humantech Paper Award**: February 2022  
*Silver Prize, Computer Science and Engineering*
- **High Honors at Graduation**: August 2020
- **Second prize at Software Capstone Design**: December 2019

## TEACHING EXPERIENCE

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- **Multi-core and GPU Programming (CSI4119)**: Teaching Assistant, Spring 2021
- **Logic Circuit Design (CSI2111)**: Teaching Assistant, Fall 2020

## SKILLS

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- **Python, C, C++, Java**
- **Pytorch, Tensorflow, Pandas, SciPy**
- **Korean** (Native), **English** (Fluent), **Japanese** (Intermediate)