

# Jaewon Chung

COMPUTER SCIENCE · COMPUTER ENGINEERING

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## Summary

I am a senior student majoring Electrical and Computer Engineering at Seoul National University, South Korea. I am interested in conducting research on or being involved in projects that deal with large-scale or networked computer systems. Being especially interested in deep learning workloads, I follow up on state-of-the-art deep learning research during my free time. I seek to apply for a Ph.D. position in the USA late this year.

## Education

### Seoul National University

Seoul, South Korea

B.S. STUDENT IN ELECTRICAL AND COMPUTER ENGINEERING

2015 - Present

- Current GPA: 4.07/4.3 (overall) 4.13/4.3 (major)

## Research Experience

### Virtual Machine and Optimization Lab

SNU, South Korea

SENIOR PROJECT

Dec 2019 - Jun 2020

- Distributed DNN inference, Mobile Computing
- Worked with Professor Soo-Mook Moon on developing distributed DNN inferences schemes.
- Proposed a distributed video DNN inference scheme that drastically reduces network traffic by exploiting intermittent knowledge distillation.
- Implemented the scheme with PyTorch and OpenMPI with an NVIDIA Jetson Nano embedded board as the client and conducted evaluation.

### Computer Vision Lab

SNU, South Korea

RESEARCH INTERN

Jun 2019 - Dec 2019

- Meta-learning, Few-shot Classification
- Conducted research on better meta-initialization points for Model-Agnostic Meta-Learning (MAML) using an LSTM-based neural memory.
- Conducted research on generating task-aware class embeddings to augment feature maps of MAML by formulating a convex program (DPP).

### Lab of Imaging Science and Technology

SNU, South Korea

RESEARCH INTERN

Jun 2019 - Aug 2019

- Quantitative Susceptibility Mapping (QSM), Deep Learning
- Worked with Professor Jongho Lee and submitted our solution to the QSM challenge held by the 5th International Workshop on MRI Phase Contrast and QSM.
- Designed, implemented, and trained a U-Net variant on in-vivo brain MRI field images and their COSMOS results.

## Extracurricular Activity

### Deepest

SNU, South Korea

MEMBER

Dec 2018 - Present

- A free research group on all domains of deep learning. Aggregates researchers from both academia and industry with various backgrounds.
- Gained experience extensively in computer vision and meta-learning, and attended talks on computer vision, natural language processing, reinforcement learning, and speech recognition.
- Gave a talk with the title "Meta-Learning plus Memory".

### Coursera Global Translator Community

[translate-coursera.org](https://www.coursera.org/global-translator-community)

LANGUAGE COORDINATOR

Oct 2018 - Present

- Served as Language Coordinator, a selected position that reviews and confirms works by other translators.
- Created Korean subtitles for Coursera Lectures initially provided only in English. Focused on courses related to machine learning.

## Skills

**Programming** Python, PyTorch, C++, C, MATLAB, JavaScript, LaTeX

**English** Perfect score on both TOEFL (Feb 2020) and TOEIC (Oct 2018)

## Publications

- **ShadowTutor: Distibuted Partial Distillation for Mobile Video DNN Inference**, arXiv:2003.10735 (under review at ICPP 2020)