

Jang-Hyun Kim

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Education

Seoul National University

M.S. & Ph.D. in Computer Science Current
B.S. in Mathematical Science, *Summa Cum Laude* 2019.Feb
• 2 years mandatory military service

Seoul Science High School

2012.Feb

Experience

NAVER CLOVA

2018.Aug - 2019.Jan

- AI global research residency (Advisor: Prof. Jaejun Yoo)
- Research on speech enhancement ([Demo](#))

Statistical Multiscale Analysis Laboratory, SNU

2017.Dec - 2018.Aug

- Research internship (Advisor: Prof. Hee-Seok Oh)
- Research on Riemannian manifold learning (TPAMI21)

Deepest, SNU Deep Learning Community

2017.Sep - 2020.Aug

- Community manager and project participant
- Caricature generation ([GitHub](#)), source separation (Deep Complex U-Net)

True Balance, India Mobile App Service

2017.Jan - 2017.Apr

- Data analysis intern
- Working with SQL, Spark, Python

Publications

- [P3] Compressed Context Memory For Online Language Model Interaction
Jang-Hyun Kim, Junyoung Yeom, Sangdoo Yun, Hyun Oh Song
arXiv, 2023
- [C5] Neural Relation Graph: A Unified Framework for Identifying Label Noise and Outlier Data
Jang-Hyun Kim, Sangdoo Yun, Hyun Oh Song
NeurIPS, 2023
- [C4] Dataset Condensation via Efficient Synthetic-Data Parameterization
Jang-Hyun Kim, Jinuk Kim, Seong Joon Oh, Sangdoo Yun, Hwanjun Song, Joonhyun Jeong, Jung-Woo Ha, Hyun Oh Song
ICML, 2022
- [J2] *spherepc*: An R Package for Dimension Reduction on a Sphere
Jongmin Lee, **Jang-Hyun Kim**, Hee-Seok Oh
The R Journal, 2022
- [C3] Uncertainty-Based Offline Reinforcement Learning with Diversified Q-ensemble
Gaon An*, Seungyong Moon*, **Jang-Hyun Kim**, Hyun Oh Song
NeurIPS, 2021
- [C2] Co-Mixup: Saliency Guided Joint Mixup with Supermodular Diversity
Jang-Hyun Kim, Wonho Choo, Hosan Jeong, Hyun Oh Song
ICLR Oral, 2021

- [J1] Spherical Principal Curves
Jongmin Lee*, **Jang-Hyun Kim***, Hee-Seok Oh (*: equal contribution)
TPAMI, 2021
- [C1] Puzzle Mix: Exploiting Saliency and Local Statistics for Optimal Mixup
Jang-Hyun Kim, Wonho Choo, Hyun Oh Song
ICML, 2020
- [P2] Phase-Aware Speech Enhancement with Deep Complex U-Net
Hyeong-Seok Choi, **Jang-Hyun Kim**, Jaesung Huh, Adrian Kim, Jung-Woo Ha, Kyogu Lee
arXiv, 2019
- [P1] Multi-Domain Processing via Hybrid Denoising Networks for Speech Enhancement
Jang-Hyun Kim*, Jaejun Yoo*, Sanghyuk Chun, Adrian Kim, Jung-Woo Ha (*: equal contribution)
arXiv, 2018

Open Source

- Google’s Speaker Verification ★330+ ([GitHub](#), [Kaggle](#))
- TensorFlow implementation of “Generalized End-to-End Loss for Speaker Verification”
- Puzzle Mix ★150+ ([GitHub](#))
- PyTorch implementation of “Puzzle Mix: Exploiting Saliency and Local Statistics for Optimal Mixup”
- Co-Mixup ★100+ ([GitHub](#))
- PyTorch implementation of “Co-Mixup: Saliency Guided Joint Mixup with Supermodular Diversity”
- Efficient Dataset Condensation ★80+ ([GitHub](#))
- PyTorch implementation of “Dataset Condensation via Efficient Synthetic-Data Parameterization”
- spherepc* ([CRAN](#), [Document](#))
- R package of “Spherical Principal Curve”

Honors and Awards

Qualcomm Innovation Fellowship Korea [C2]	2021
Microsoft Research Asia Fellowship Nomination Award	2021
Youlchon AI Star Scholarship	2021
First Prize , Samsung Electronics & SNU Excellent Paper Award [C2]	2021
Korea Foundation for Advanced Studies (KFAS) Ph.D. Scholarship	2020 - 2024
Honorable Mention , Korean Statistics Society SG Poster Paper Award [J1]	2019
Silver Medal , Korean Contest of Mathematics for University Students	2017
Presidential Science Scholarship	2012 - 2019
Gold Medal , Korean Mathematical Olympiad (KMO)	2009

Professional Service

Conference Reviewer	NeurIPS 2021-2023, ICLR 2022-2023, ICML 2023
Program Committee	NeurIPS Workshop, “Interpolation Regularizers and Beyond”, 2022 NeurIPS Workshop, “ImageNet: Past, Present, and Future”, 2021

Teaching

SNU, Undergraduate Research Program	Research Mentor, Fall 2021
SNU, Machine Learning	Teaching Assistant, Fall 2021
SNU, Introduction To Deep Learning	Teaching Assistant, Spring 2020

References

- Hyun Oh Song** Associate Professor, Dept. of Computer Science and Engineering, SNU (hyunoh@snu.ac.kr)
Hee-Seok Oh Professor, Dept. of Statistics, SNU (heeseok@stats.snu.ac.kr)