Jang-Hyun Kim

blue378@snu.ac.kr github scholar

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 Highschool   2012.Feb

Experience

NAVER CLOVA   2018.Aug - 2019.Jan

AI global research residency

Research on speech enhancement (github, demo)

Statistical Multiscale Analysis Laboratory, SNU   2017.Dec - 2018.Aug

Research internship (Advisor: Prof. Hee-Seok Oh)

Research on Riemannian manifold learning (Spherical Principal Curves, 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

Work with SQL, Spark, Python

Publications

[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

[J 2] *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

[J 1] 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 (code, paperswithcode, kaggle)
 - Implementation of 'Generalized End-to-End Loss for Speaker Verification' (300+ Github Stars)

R package *spherepc* (code, document).
 - Implementation of 'Spherical Principal Curve'

Honors and Awards

Qualcomm Innovation Fellowship Korea	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 - current
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 2021-2022, ICLR 2022, ICML 2022
Program Committee	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)