Jang-Hyun Kim

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Education

Seoul National University   *2019.Sep -*
  M.S. & Ph.D in Computer Science

Seoul National University   *2012.Mar - 2019.Feb*
  B.S. in Mathematical Science, *Summa Cum Laude*
  2 years mandatory military service

Seoul Science Highschool   *2009.Mar - 2012.Feb*

Experience

Machine Learning Laboratory, SNU   *2019.Mar - 2019-Aug*
  Research Internship (Advisor : Prof. Hyun Oh Song)

NAVER CLOVA   *2018.Aug - 2019.Jan*
  AI Global Research Residency
  - Research on speech enhancement and speaker verification (github, demo)

Statistical Multiscale Analysis Laboratory, SNU   *2017.Dec - 2018.Aug*
  Research Internship (Advisor : Prof. Hee-Seok Oh)
  - Research on manifold learning (Spherical Principal Curves, accepted at TPAMI)

Deepest, SNU Deep Learning Student Community   *2017.Sep - 2020.Aug*
  - Caricature generation (github)
  - Source separation, speech enhancement (github)

True Balance, Mobile App Service for India   *2017.Jan - 2017.Apr*
  Data Analysis Intern
  - Work with SQL, Spark, Python

Publications

[C2] Co-Mixup: Saliency Guided Joint Mixup with Supermodular Diversity (*ICLR* Oral, 2021)
      - **Jang-Hyun Kim**, Wonho Choo, Hosan Jeong, Hyun Oh Song

[J1] Spherical Principal Curves (*TPAMI*, 2021)
      - Jongmin Lee*, **Jang-Hyun Kim***, Hee-Seok Oh

[C1] Puzzle Mix: Exploiting Saliency and Local statistics for Optimal Mixup (*ICML*, 2020)
      - **Jang-Hyun Kim**, Wonho Choo, Hyun Oh Song

[P2] Phase-Aware Speech Enhancement with Deep Complex U-Net (*arxiv*, 2019)
      - Hyeong-Seok Choi, **Jang-Hyun Kim**, Jaesung Huh, Adrian Kim, Jung-Woo Ha, Kyogu Lee

[P1] Multi-Domain Processing via Hybrid Denoising Networks for Speech Enhancement (*arxiv*, 2018)
      - **Jang-Hyun Kim***, Jaejun Yoo*, Sanghyuk Chun, Adrian Kim, Jung-Woo Ha

* denotes equal contribution.

Open Source

  Speaker Verification (code, paperswithcode, kaggle)

- Implementation of Generalized End-to-End Loss for Speaker Verification (from Google)

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

HONORS and AWARDS

Scholarships

Korea Foundation for Advanced Studies (KFAS), *for M.S. & Ph.D.*

Presidential Science Scholarship, *for B.S.*

Research Awards

Samsung Electronics & SNU Excellent Paper Award (*with Puzzle Mix, ICML* 2020), *Third Prize*

Korean Statistics Society SG Poster Paper Award (*with SPC, TPAMI* 2021), *Honorable Mention*

Math Contests

Korean Contest of Mathematics for University Students 2017, *Silver Medal*

Korean Mathematical Olympiad (KMO) 2009, *Gold Medal*

Teaching

SNU, Introduction To Deep Learning   Teaching Assistant, Spring 2020