CHAERIN KONG

· (+82) 10-6261-4616 · rin4616@gmail.com · reyllama.github.io

RESEARCH INTEREST

Machine Learning, Computer Vision, Probabilistic Modeling

EDUCATION

SEOUL NATIONAL UNIVERSITY   Seoul, Korea
M.S. candidate, Department of Intelligence and Information   *Sept. 2021 – Present*
Advisor: Prof. Nojun Kwak, GPA: 4.1/4.3

SEOUL NATIONAL UNIVERSITY   Seoul, Korea
Bachelor of Business Administration and Science in Statistics   *Mar. 2015 – Aug. 2021*
Summa cum laude, GPA: 4.11/4.3

PUBLICATIONS

J. Jang*, **C. Kong***, D. Jeon, S. Kim, N. Kwak, "Unifying Vision-Language Representation Space with Single-tower Transformer", *AAAI Conference on Artificial Intelligence (AAAI)*, 2023. (*Oral Presentation*)

C. Kong, D. Jeon, O. Kwon, N. Kwak, "Leveraging Off-the-shelf Diffusion Model for Multi-attribute Fashion Image Manipulation", *Winter Conference on Applications of Computer Vision (WACV)*, 2023.

J. Jang, S. Kim*, KY Yoo*, **C. Kong**, J. Kim, N. Kwak, "Self-distilled Self-supervised Representation Learning", *Winter Conference on Applications of Computer Vision (WACV)*, 2023.

Y. Song, **C. Kong**, S. Y. Lee, N. Kwak, J. Lee, "Towards Efficient Neural Scene Graphs by Learning Consistency Fields", *British Machine Vision Conference (BMVC)*, 2022.

C. Kong, J. Kim, D. Han, N. Kwak, "Few-shot Image Generation with Mixup-based Distance Learning", *European Conference on Computer Vision (ECCV)*, 2022.

C. Kong, N. Kwak, "Conservative Generator, Progressive Discriminator: Coordination of Adversaries in Incremental Few-shot Image Synthesis", *Open Archive.*

RESEARCH EXPERIENCE

SNU, MACHINE INTELLIGENCE AND PATTERN ANALYSIS LAB   Seoul, Korea
Graduate Student Researcher   *Sept. 2021 – Present*
- Published a paper on few-shot image synthesis to ECCV that pioneers pretraining-free image generation with only a handful of training images.
- Devised a novel framework for incremental few-shot generative modeling that tackles overfitting and catastrophic forgetting with sensible role allocation in GAN.
- Modeled nationwide logistics volumes with GNNs in a national R&D project with MOLIT.
- Led weekly seminars on self-supervised learning, neural rendering and continual learning.

NAVER, LANGUAGE AND VISION TEAM SeongNam, Korea

Research Intern *Apr. 2022 – Sept. 2022*

- Headed research projects on modality-agnostic vision-language representation learning and text-driven fashion image editing.
- First-authored two papers, each accepted to AAAI 2023 and WACV 2023.
- Provided thorough technical survey of recent advances in data-efficient 3D rendering.

KAIST, DATA AND VISUAL ANALYTICS LAB SeongNam, Korea

Research Intern *Mar. 2021 – Apr. 2021*

- Conducted numerous experiments for a research project on image outpainting.
- Implemented baselines in PyTorch whose codebases are originally written in TensorFlow.

SNU, MACHINE INTELLIGENCE AND PATTERN ANALYSIS LAB Seoul, Korea

Research Intern *Jan. 2021 – Feb. 2021*

- Spearheaded a team project on animation frame interpolation, being in charge of data preparation, modeling and evaluation.

ARTIFICIAL INTELLIGENCE INSTITUTE OF SNU (AIIS) Seoul, Korea

Research Intern *Jul. 2020 – Aug. 2020*

- Proposed a novel technical indicator optimization framework based on attention mechanism and verified its advantages with systematic backtesting.

PROFESSIONAL EXPERIENCE

BEMYPET Seoul, Korea

Operations Manager Intern *Dec. 2019 – Jan. 2020*

- Enhanced customer acquisition and retention by KPI monitoring with Google Analytics.
- Assisted web service development to add customer-oriented features to the platform.

WOOWA BROTHERS Seoul, Korea

Data Analyst Intern *Sept. 2019 – Nov. 2019*

- Analyzed customer retention and churn rate with respect to the total delivery time.
- Presented data analytics reports that laid foundations for a new delivery fee charge system.

MILITARY EXPERIENCE

REPUBLIC OF KOREA ARMY BAND, 32ND INFANTRY DIVISION Sejong, Korea

First Trumpet, Squad Leader *Nov. 2016 – Aug. 2018*

- Performed in hundreds of military and public ceremonies as a lead trumpet and squad leader.

SCHOLARSHIPS

Merit-Based Scholarship (full tuition), SNU *Spring 2016, Fall 2018, Spring 2019, Fall 2019*
Merit-Based Scholarship (partial tuition), SNU *Spring 2015, Fall 2015, Fall 2020*

TECHNICAL SKILLS

- Language: Korean (native fluency), English (full professional proficiency, TOEFL iBT: 118/120)
- Computer: Python (PyTorch, TensorFlow, Django), SQL, R, HTML, CSS

EXTRACURRICULAR

- MOOC Platform *ELICE*, Instructor (python, machine learning, statistics) *Jul. 2021 – Jul. 2022*
- SNU AI Study Group *DIYA, Generative Models Team*, Member *Mar. 2020 - Aug. 2020*
- SNU Data Analytics Group *Growth Hackers,* Member *Mar. 2019 - Aug. 2019*
- DB Group *Dream Mentoring*, Volunteer Student Mentor *Mar. 2016 – Aug. 2016*
- SNU *Debate Contest*, 1st place *Nov. 2015*
- Children Acting Class *Nanum*, Volunteer Student Mentor *Mar. 2015 - Nov. 2016*
- SNU *Drama Club*, Member (Lead Actor, Stage Designer) *Mar. 2015 – Nov. 2016*
- SNU *Football Club Armada*, Member *Mar. 2015 – Aug. 2016*
- GFN *English Debate Contest*, 2nd place *Sept. 2013*