

CHAERIN KONG

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

RESEARCH INTEREST

Generative Models, Multimodal Learning, Data-efficient Learning

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

S. Lee, **C. Kong**, D. Jeon, N. Kwak, “AADiff: Audio-Aligned Video Synthesis with Text-to-Image Diffusion”, *CVPR Workshop on AI for Content Creation*, 2023.

C. Kong, N. Kwak, “Analyzing Multimodal Objectives through the Lens of Generative Diffusion Guidance”, *ICLR Workshop on Multimodal Representation Learning*, 2023. (*Spotlight Long Presentation*)

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.

RESEARCH EXPERIENCE

SEOUL NATIONAL UNIVERSITY

Seoul, Korea

Graduate Student Researcher

Sept. 2021 – Present

- Spearheaded research projects on improving the practical applicability of generative models by minimizing the impact of dataset and computation constraints.

- Pioneered vision-language representation learning that completely unifies the two spaces in pursuit of a more human-like multimodal understanding.
- Led weekly seminars on self-supervised learning, vision-language and neural rendering.

NAVER, LANGUAGE AND VISION TEAM

SeongNam, Korea

Vision-Language AI Intern

Apr. 2022 – Sept. 2022

- Headed an exploratory project on text-driven interactive fashion image editing and oversaw its initial integration to NAVER e-commerce.
- Enhanced multimodal document understanding by modifying the contrastive learning formulation, which was presented orally in AAAI 2023.
- Provided a thorough technical survey on methods to empower 2D models for 3D rendering.

KAIST, DATA AND VISUAL ANALYTICS LAB

SeongNam, Korea

Research Intern

Mar. 2021 – Apr. 2021

- Conducted experiments for a research project on image outpainting, being mainly responsible for PyTorch implementation of legacy TensorFlow code bases.

SNU, MACHINE INTELLIGENCE AND PATTERN ANALYSIS LAB

Seoul, Korea

Research Intern

Jan. 2021 – Feb. 2021

- Orchestrated a team project on animation frame interpolation.
- Collected animation frame data and open sourced upon cleansing and preprocessing.

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*