Jungwoo Kim

http://kjungwoo03.github.io

Github: https://github.com/kjungwoo03
Email : kjungwoo [a.t] yonsei.ac.kr
Linkedin: jungwoo-kim-44a700288

SUMMARY

My name is Jungwoo Kim. I am an undergraduate student at Yonsei University.
My research interest lies in various topics based on machine learning (ML) and computer vision (CV).
Recently, I'm interested in topics including Generative AI, Explainable AI, and Adversarial Attacks.
I am a passionate, steady, and capable student.

EDUCATION

- **Yonsei University*** — Seoul, South Korea
  B.S. in School of Integrated Technology (GPA: 3.96/4.30) — *Mar. 2022 – Feb. 2025*

* One year early graduation.

TEAM PROJECTS

- **NextLevel2****
  Neural Extraction and Tracking Framework for K-POP Choreography Dataset — *Aug. 2024 – Present*
- **Audio Sentiment Classification****
  Improving text-based sentiment classification performance using speech audio analysis. — *May. 2024 – Jun. 2024*
- **InferPrompt: Reframing Prompt Engineering with BLIP-2****
  Prompt engineering using text style transfer between inferred and input prompt. — *Feb. 2024 – Mar. 2024*
- **NextLevel: A new Dimension of Choreography AI**
  Developing choreography AI to incorporate lyrics into dance, based on EDGE model. — *Sep. 2023 – Dec. 2023*
- **HAE-RAE**
  Developing a benchmark dataset to evaluate the large language model's Korean proficiency. — *Apr. 2023 – Jul. 2023*

** Projects that serve as team leader.

PERSONAL PROJECTS

- **Adversarial Robustness in Continual Learning Scenario**
  Analyzing adversarial robustness in class-incremental continual learning scenario. — *Dec. 2023 – Present*
- **Detecting AI-generated Video using Texture Contrast*****
  Applying PatchCraft architecture to AI-generated Video Detection. — *Mar. 2024 – Jun. 2024*
- **Medical Image Super Resolution**
  Super resolution for low-dose CT image based on RED-CNN. — *Jul. 2023 – Aug. 2023*
- **Continual Learning Analysis*****
  Exploring feature space transformations in continual learning using t-SNE analysis. — *Jul. 2023 – Aug. 2023*
- **Reinforcement Learning for GPS Accuracy Enhancement**
  Employing reinforcement learning to enhance GPS signal accuracy. — *Sep. 2022 – Mar. 2023*

*** Short-term side projects.

PAPERS

- **HAE-RAE Bench: Evaluation of Korean Knowledge in Language Models**
  Gyujin Son, Hanwool Lee, Suwan Kim, Huiseo Kim, Jaecheol Lee, Je Won Yeom, Jihyu Jung, **Jungwoo Kim**, Songseong Kim, LREC-COLING, 2024.

- **K^2 EVAL: Harnessing the Evaluation of Linguistic Fluency and Ethnolinguistic Knowledge in Korean**
  Gyujin Son, Hyunwoo Ko, Hoyoung Lee, Seunghyuk Hong, Yewon Kim, **Jungwoo Kim**, ACL 2024 Workshop C3NLP, 2024.

Research Experiences

- **Multimedia Computing and Machine Learning Lab, Yonsei University** Incheon, South Korea
  Undergraduate Research Intern (Advisor: Jong-seok Lee) *Jan. 2024 - Present*

- **Medical Imaging Systems Lab, Yonsei University** Seoul, South Korea
  Undergraduate Intern (Advisor: Jongduk Baek) *Jul. 2023 - Aug. 2023*

- **Intelligent Unmanned Systems Lab, Yonsei University** Incheon, South Korea
  Undergraduate Intern (Advisor: Jiwon Seo) *Sep. 2022 - Jun. 2023*

Programming Skills

- **Languages** - Python (Expert), C (Advanced), C++ (Beginner)

- **Frameworks**: React (Beginner)

- **Others**: Matlab (Advanced)

Honors and Awards

- **Certification, 4th LG Aimers/Data Intelligence**
  Topic: Developing a B2B sales opportunity prediction model based on MQL data. *Feb. 2024*

- **Excellence Award, 2023 Yonsei Medical Convergence Challenge**
  Topic: Developing ResNet based DL model on wearable device for diagnosing. *Jan. 2023*

Teaching Assistantships

- **Teaching Assistant**
  Computational Thinking and SW Programming (YCS1001), Spring 2023, Spring 2024, Summer 2024, Fall 2024.

- **Tutor**
  Mechatronics Project (IIT4312), Spring 2024.

Extracurricular Activities

- **Yonsei Computer Club**
  Member of Friendship Team (Mar. 2024 - Jun. 2024) *Sep. 2022 - Present*

- **Yonsei Data Science Lab**
  11th Member, Head of Academic Team (Jun. 2024 - Present) *Dec. 2023 - Nov. 2024*