Chanhyeok Park

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INTRODUCTION

I am Chanhyeok Park, an ambitious and self-driven undergraduate student at the KAIST School of Computing. My academic interests lie at the intersection of **Intellectual Property (IP) law, deep learning, 3D computer vision, and LLMs**. Currently, my primary focus is exploring how advanced deep learning methodologies, particularly **Large Language Models (LLMs)**, can be effectively applied to Legal Technology, aiming to drive meaningful innovation in the **legal domain**.

During my time as a research intern at KAIST Visual AI Group, I had the privilege of being mentored by Prof. Minhyuk Sung, whose expertise and guidance greatly enriched my experience. Furthermore, it was an exceptional honor to collaborate with Prof. Woojung Jon, a distinguished legal scholar. I am deeply convinced that the thoughtful integration of deep learning technologies across diverse disciplines holds the potential to drive transformative innovation in our future.

EDUCATION

Korea Advanced Institute of Science and Technology, KAIST   2020 ∼ **Now**
B.S. in School of Computing(Major) & Intellectual Property(Minor)
GPA: 4.03 / 4.3

PUBLICATION

1. 인공지능 산출물 보호에 관한 연구 - 인간의 개입 정도를 중심으로
   박찬혁(Chanhyeok Park), 전우정
   계간저작권(Copyright Quarterly), 2024년 겨울호, 제37권 제4호(통권 제148호)

2. Split, Merge, and Refine: Fitting Tight Bounding Boxes via Over-Segmentation and Iterative Search
   Chanhyeok Park, Minhyuk Sung
   International Conference on 3D Vision(3DV), 2024

3. 기술유출 피해금액 산정 등에 관한 연구(A Study on the Calculation of Technology Leakage Damage)
   전우정, 박성필, 박태정, 김범태, 정유경, 이창곤, 김기범, **박찬혁(Chanhyeok Park)**, 홍유승
   대검찰청 용역연구과제, 2023

EXPERIENCE

- **Researcher, Researching and developing legal AI system**   2024.10 ∼ **Now**
  Legal AI researcher at Intellicon Inc.

- **AI Developer, Developing Carbon AI System**   2024.08 ∼ **Now**
  Developing Retrieval-Augmented Generation(RAG) Large Language Models(LLM) for climate, environmental, urban in Newtonne Startup.

- **Research Assistant, Processing History Text Data using AI**   2024.08 ∼ 2024.12
  Joint research project with Prof. Donghyun Woo.
  Processing historical data including North Korea, Atomnaya Energiya Journal to support the claim in history research.

- **Researcher, Summarizing Precedents using Large Language Models**   2023.10 ∼ 2024.02
  Research project with Patent Court of Korea.
  Summarizing judicial precedents using deep learning/LLMs to help the judges figure out the case more easily.

- **Research Intern, Tight Bounding Boxes for Shape Decomposition**   2022.01 ∼ 2023.03
  Research intern at KAIST Visual AI Group under supervision of Prof. Minhyuk Sung.
  After splitting 3D meshes into small partitions, we merge the partitions with a criterion that induces tight bounding boxes. Then, we refine the boxes using MCTS to tighten them by fixing the errors. Check out the paper for more details.

- **Quant Researcher, High-Frequency Trading Strategy using Order Book** 2022.06 ∼ 2022.10
  Quant research intern at Schperics Inc.
  Finding high-frequency trading strategy using deep learning with cryptocurrency order book data.

- **Research Intern, Long Term Video Prediction**   2021.06 ∼ 2021.12
  Research intern at KAIST Vision and Learning Lab under supervision of Prof. Seunghoon Hong.
  Solving frame collapse problem when generating long-term videos. Based on SRVP, approaches like VQVAE, Temporal Abstraction and Adversarial Training were explored to mitigate the error accumulation in the latent vector which is a common problem in auto-regressive models.

Awards, Honors

1. Surim Foundation Talent Scholarship, 2024 Fall
   Scholarship supported by the Surim Foundation to set an example for others by honoring a student who has made an outstanding achievement or significant contributions while enrolled in an undergraduate program.

2. Kiturami Foundation College of Engineering Scholarship, 2024 Fall
   Scholarship supported by the Kiturami Foundation to students in engineering fields. Selected as two out of whole KAIST College of Engineering undergraudate students.

3. CoE Leadership Award, KAIST College of Engineering, 2023 Fall
   Awarded to top students who achieved high research accomplishments.

4. Dean's List, KAIST School of Computing, 2022 Fall
   Awarded to top students who achieved high academic accomplishments.

5. National Science & Technology Scholarship, 2022 Spring
   Scholarship supported by the Korean government to students in science & engineering fields.

6. Dean's List, KAIST School of Freshman, 2020 Fall
   Awarded to top students who achieved high academic achievements.

7. Hanseong SonJaeHan Scholarship (6th), 2019
   Awarded to who has creative thoughts and passion, and has a high chance of receiving a novel prize.

Teaching

- **TA of Machine Learning for 3D Data (CS479), 2023 Fall**
  Mentored team projects on 3D deep learning to KAIST students.

- **TA of Modern Macroeconomic Theory and Dynamic Programming (HSS310), 2023 Fall**

- **TA of Introduction to Programming (CS101), 2021 Fall, 2024 Spring, 2024 Fall**
  Taught basics of Python language to KAIST students.

- **Tutor of KAIST Cyber Education for Gifted, 2020 Fall**
  Taught basics of C language to elementary students.

Skills

2020 ACM-ICPC Seoul Regional 12th place (C, C++)
Python, R, PyTorch, TensorFlow, LaTeX, MATLAB, SageMath, Scala, JavaScript, React, LangChain

Last updated on January 8, 2025