Tae-Hoon Her

Bachelor Student in the Big Data & Smart IoT Department
Hallym University
1, Hallymdaehak-gil, Chuncheon-si, Gangwon-do, Republic of Korea
taehoon.her@gmail.com & taehoon121@hallym.ac.kr
+82) 10-8607-6438
https://github.com/TaeHoonHer

Introduction

Hello, my name is Tae-Hoon Her, and I am an undergraduate researcher in the Software Department at Hallym University. I am currently studying Natural Language Processing (NLP) and Computer Vision (CV) at the A.I. Accelerator Computing Lab. My current area of interest is medical image captioning, document summarization, and fact checking. Since 2021, I have been involved in four projects sponsored by the Ministry of Oceans and Fisheries. I am currently working on a project related to text classification and defending against adversarial attacks on image data.

Education

Mar. 2020 ~ Present	**Hallym University** Major in Big Data	Chuncheon, Korea
	Bachelor Student GPA: 3.7 / 4.5	

Research Interests

- Document Summarization
- Conversational Question Answering
- Medical Image Captioning

Conferences

1. TaeHoon Her, DongYoung Kim, JeongGun Lee, "Evaluating the Robustness of RNN-Based Models in Emotion Classification with Noisy Data", JCCI, YeoSu, Korea (Apr. 2023) - Oral

2. TaeHoon Her, "Research on effective machine learning based models for imbalanced cardiovascular disease datasets.", KCC, Jeju Island, Korea (Jun. 2023) – Poster

3. Tae-Hoon Her*, Na-Hyun Kim, So-Yeon Kim, Ju-Hyeong Kim, "Improving the Efficiency of Defense Mechanisms Against Adversarial Attacks", Korea Artificial Intelligence Conference, Jeju Island, Korea(Sep. 2023) - Oral

4. Tae-Hoon Her*, Na-Hyun Kim, So-Yeon Kim, Ju-Hyeong Kim, "Adversarial Attacks and Detection Methods for Autonomous ship", Ack, Busan, Korea(Nov. 2023) - Oral

Research Experiences

- Research Intern at A.I. Accelerator Computing, Hallym University, Korea (Feb. 2022 ~ June.2023)

- Research Intern at Advanced ultrasound research laboratory, DGIST, Korea (June. 2023 ~ July.2023)

- Medical Image Processing Lab, Hallym University, Korea (Aug. 2023 ~ Present)

Awards and Honors

- Hallym University Startup Idea Competition(1st), Hallym University, Korea (Nov. 2021) Hallym

- University Startup Idea Competition(1st), Hallym University, Korea (Nov. 2022)

- President's Award(1st) for Software Capstone Design at Hallym University (June. 2023)

- Korean Information Processing Society President's Award(2nd) (Nov. 2023)

- Hallym University 2023 SW Week GitHub Resume Competition Second Prize (Nov. 2023)

Projects

- National Medical Ultrasound Research Project Assistant Researcher (Sep. 2023 ~ Feb. 2024)

- Development of AI-Based Maritime Logistics Analysis Program, Ministry of Oceans and Fisheries, Korea / Development of AI Model for Data Analysis, Classification, and Recommendation (Apr. 2023 ~ Nov. 2023)

- Implementation of AI Security Technologies for Autonomous Vessels, Ministry of Oceans and Fisheries, Korea (Apr. 2023 ~ Nov. 2023)

- Capstone Design, Hallym University, Korea (Mar. 2023 ~ Jul. 2023)

- Development of AI-Based Interactive Maritime Logistics Integrated Complaint Service, Ministry of Oceans and Fisheries, Korea / Android Development & Chatbot Design and Development (Apr. 2022 ~ Nov. 2022)

- IoT Port Access Management System, Ministry of Oceans and Fisheries, Korea / Android Development and Raspberry Pi Coding (Apr. 2021 ~ Nov. 2021)

Skills and Techniques

Languages

- Python, Java, Kotlin, Latex, Linux, Matlab

Leadership & Groups

- President of Data人Sight, Hallym University's Big Data AI Club (2021)
- Mentor for Data人Sight, Hallym University's Big Data AI Club, specializing in Data Structures and Algorithms using Python (2021)
- Mentor for "Sangsaeng Learning Ddimdol" program in the Big Data Department of Hallym University (2022)
- President of "Tensor" team, the academic club of the Big Data Department at Hallym University, known as "CEARANG" (2023)
- Java Mentor for University Student Union (2023)

Hackathon

- UI & Android Developer for the SW-centered University Joint Hackathon
- AI Developer for the SKKU AI x Bookathon event at Sungkyunkwan University
- Representative Team from Gangwon Province Participating in National SW-Centric Hackathon

Internship

Junisis R&D center Intern

- Used Matlab for Frequency analysis Learned
- Verilog
- Design printed circuit board