

Minsuk Chang

UNDERGRADUATE STUDENT

Seoul National University · Dept. of Computer Science & Engineering

✉ jangsus1@snu.ac.kr | 🏠 minsukchang.info

About

A creative researcher passionate about bridging the gap between humans and AI. As a researcher, I aim to explain AI models and increase fairness to reach robust and reliable AI. Through research in various fields of computer science, I have demonstrated dedication to ensuring the AI model's fairness and explaining AI models with the help of Visualization. Armed with technical skills in CS, I am eager to become an academic pioneer driving human-centric AI progress.

Education

Seoul National University

BACHELOR OF SCIENCE

- Major: Computer Science and Engineering
- GPA: 3.6/4.3 (In-Major 3.74)

Seoul, Korea
2018.03 - 2024.02

Publications

PUBLISHED

Tensor Space Model-based Textual Data Augmentation for Text Classification. **Minsuk Chang**, Han-joon Kim. IEEE BigData '23

IN REVIEW

CLeVer: Continual Learning Visualizer for Detecting Task Transition Failure. **Minsuk Chang** et al., IEEE PacificVis '24

IN PREP

Extracting Human Attention through Human-AI Collaborative Data Labeling. **Minsuk Chang** et al.

Research Experience

Seoul National University - Human-Computer Interaction Lab

ADVISOR: PROF. JINWOOK SEO

July. 2023 - Present

- Paper: Extracting Human Attention through Human-AI Collaborative Data Labeling
- Project: Human-in-the-loop System for Posture Extraction in Industrial Videos
- Project: CLeVer: Continual Learning Visualizer for Detecting Task Transition Failure
- Project: Descriptive Fair Lens: Leveraging Image-to-Text Model for Image Bias Detection

University of Seoul - Data Mining Lab

ADVISOR: PROF. HAN-JOON KIM

Sept. 2022 - Present

- Paper: Tensor Space Model-based Textual Data Augmentation for Text Classification

Seoul National University - Human-Centered System Lab

ADVISOR: PROF. YOUNGKI LEE

April. 2022 - June. 2022

- Project: Smarthome IoT Sensor Anomaly Detection

Industrial Experience

Naver Appolo Dev.

Pangyo, Korea

UNDERGRADUATE INTERNSHIP

Jan. 2023 - Feb. 2023

- Interned at Naver Corporation and researched how to extract trending topics from user-generated content. Learned non-ML techniques for analyzing time-series data. Used different clustering methods and seasonal algorithms to identify topics linked to specific dates.

PromptTechnology

Seoul, Korea

WEB DEVELOPMENT INTERNSHIP

July. 2022 - Aug. 2022

- Worked on modules for the Public Data Portal run by the Ministry of Public Administration and Security. Created an improved cache system to handle high traffic, up to 100 API calls per second. Gained experience with MSA architecture and learned multiple languages and protocols like golang, typescript, and grpc.

Airforce, Republic of Korea

Korea

SYSTEM MANAGEMENT ASSISTANT

Sept. 2020 - March. 2022

- Served in the military as a system management assistant in the Korea Air Force. Managed various database servers and tactical systems. Learned about potential system failures and how to address them effectively.

PromptTechnology

Seoul, Korea

WEB DEVELOPMENT INTERNSHIP

July. 2020 - Aug. 2020

- Interned at PromptTechnology and served as a project manager. Developed a survey platform web service using Node.js and Express.js. Gained practical skills in building commercial services. Collaborated with the Graduate School of Public Health at Seoul National University to develop a mental care application for COVID-19 self-quarantine.

Competitions & Projects

Reinforcement Learning for Game Yahtzee

PERSONAL PROJECT

2021 - 2022

- Inspired by Reinforcement Learning, developed a Deep Q Network-based AI which plays the board game Yahtzee. Adjusted the model and hyper-parameters to surpass human average scores of 200. Codes and reports are available on [GitHub](#).

AI Hackathon Competition

THE 3RD AI X BOOKATHON BY SKKU&MINDSLAB

Nov. 2021

- Trained a GPT-2 model to write essays on the theme "Together." Used data collected from websites and preprocessed it. Project details and results are available on [GitHub](#).

CloudNews

2021 MILITARY OPEN DATA COMPETITION BY ROKAF

May 2021 - July 2022

- [CloudNews](#) is a web service designed to gather all military news and articles scattered around. Used OCR to extract newspaper's text data and visualized its keywords as a cloud map. Participated during military service (2020.06 - 2022.04)

Awards, Fellowships, & Grants

Fall, 2023	Academic Achievement Scholarship (Fully Funded) , Jeongheon Foundation	\$ 2,300
Spring, 2023	Academic Achievement Scholarship (Fully Funded) , Jeongheon Foundation	\$ 2,300

Technical Skills

PL **Python, C, Cuda, Javascript**, Advanced
Web **NodeJS, Django, ReactJS, D3**, Advanced

English Proficiency

TOEFL

OVERALL SCORE: 112 (R:30, L:28, S:28, W:26)

July, 8, 2023