Sibeen Kim

RESEARCH GOAL

My research goal is to develop medical technologies such as AI-powered prosthetic limbs. By creating revenuegenerating human augmentation technologies, I aim to provide affordable solutions for individuals with disabilities. To achieve this mission, I will focus on AI applications and collaborate with interdisciplinary teams.

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST)

Mar 2025 -

M.S./Ph.D. in Artificial Intelligence (Advisor: Jaegul Choo)

Korea University Mar 2018 - Feb 2025

B.S. in Biomedical Engineering, GPA: 4.00 / 4.5

*Frequent leave of absence for hospitalization and surgery Jan 2018 - Oct 2021

Gyeonggi Science High School

Mar 2015 - Feb 2018

School for Gifted Students in Science

JOURNAL PAPERS

[J1] S. Kim*, I. Kim*, W.T. Yuh*, S. Han, C. Kim, Y.S. Ko, W. Cho, S.B. Park. Augmented prediction of vertebral collapse after osteoporotic vertebral compression fractures through parameter-efficient fine-tuning of biomedical foundation models. Scientific Reports 14, 31820 (2024). (*co-first authors)

RESEARCH EXPERIENCE

Letsur Jan 2024 - Present

Research Intern (Mentor: Wonwoo Cho)

Jan 2024 - Mar 2024 KAIST AI

Data and Visual Analytics (DAVIAN) Lab

Basic Study

Sungkyunkwan University

Feb 2016 - Aug 2017

B-ICT Lab

Research Intern (Advisor: Jounghwan Mun, Ahnryul Choi)

Graduation Thesis, Influence of Abnormal Foot Progression Angle on Adolescent Knee.

COURSEWORK

CS 285: Deep Reinforcement Learning (UC Berkeley, MOOC)

Jan 2025

- Homework 1: Imitation Learning
- Homework 2: Policy Gradients
- Homework 3: Q-learning and Actor-Critic Algorithms
- Homework 4: Model-Based Reinforcement Learning
- Homework 5: Exploration and Offline Reinforcement Learning

BMED436: Medical Robot (Korea University)

Sep 2024 - Dec 2024

- Forward Kinematics
- Inverse Kinematics
- Velocity Kinematics
- Manipulator Dynamics
- Dynamic Analysis
- Feedback Control

CS 182: Deep Learning (UC Berkeley, MOOC)

Jan 2024 - Mar 2024

- Homework 1: Neural Networks & Backprop.
- Homework 2: RNNs & Conv Nets.
- Homework 3: Natural Language Processing.

INVITED TALKS

OVF Collapse Prediction: Model Architecture and Hyperparameters

5th Conference on Digital Convergence Research, Korean Neurosurgical Society

Jun 15, 2024

SKILLS

English

• TOEIC 975/990 (Valid until 2025/07/09)

${\bf Algorithm}$

- Passed 2022 Kakao Blind Recruitment Algorithm Code Test