Sibeen Kim

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RESEARCH INTERESTS

Deep Reinforcement Learning

EDUCATION

Mar 2018 - Feb 2025Korea University

B.S. in Biomedical Engineering, GPA: 3.91 / 4.5

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

Gyeonggi Science High School

School for Gifted Students in Science

Mar 2015 - Feb 2018

JOURNAL PAPERS

- [J3] 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. Submitted to Scientific Reports, 2024. (*co-first authors)
- [J2] Y.W. Park, G. Jang, S.B. Kim, K. Choi, K. Han, N. Shin, S.S. Ahn, J.H. Chang, S.H. Kim, S. Lee, R. Jain. Leptomeningeal metastases in isocitrate dehydrogenase-wildtype glioblastomas revisited: Comprehensive analysis of incidence, risk factors, and prognosis based on post-contrast fluid-attenuated inversion recovery. Neuro-Oncology, 2024.
- [J1] C. Park*, S. Choi*, D. Kim, S. Kim, K. Han, S. Ahn, W. Lee, E. Choi, K. Keum, J. Kim. MRI radiomics may predict early tumor recurrence in patients with sinonasal squamous cell carcinoma. European Radiology **34**, 3151–3159 (2024). (*co-first authors)

WORK EXPERIENCE

Jan 2024 - Present

Research Intern (Mentor: Wonwoo Cho)

Severance Hospital Apr 2023 - Present

Laboratory of Advanced Neuroimaging Biomarker Research (LANIB)

Research Intern (Advisor: Sungsoo Ahn, Yaewon Park)

RESEARCH EXPERIENCE

Korea University Mar 2024 - Present

Brain Reverse Engineering by Intelligent Neuroimaging (BREIN) Lab Capstone Design Student (Advisor: Joonkyung Seong)

KAIST AI Jan 2024 - Mar 2024

Data and Visual Analytics (DAVIAN) Lab Basic Study

• Linear Algebra, CS229-Machine Learning, CS182-Deep Learning

- CS182-HW1, CS182-HW2, CS182-HW3
- 2nd place in exam

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"

PROJECTS

Comparative Analysis of SVMs and MLPs

SVM # MLP # CIFAR-10 # Hyperparameter tuning

Apr 2024

EHR Synthesis in OMOP CDM Using Diffusion Models

EHR # OMOP CDM # Diffusion model # Synthetic data

Mar 2024 - Jun 2024

Dec 2023 - Present

FL-PoST # Federated Learning # Segmentation # Glioblastoma

Neuro-QAI: Adaptive Learning in Noisy Label Environments

 $\mathrm{Dec}\ 2023$

Q-Learning # Neuroimmune System # Noisy label

Optimizing Training Procedures for Brain Tumor Segmentation

Dec 2023

#nn
UNet # BraTS18 # Gaussian KDE
 # Optimal Cropping

Comparative Study of IDH-Wildtype and IDH-Mutant Gliomas

Sep 2023 - Oct 2023

Segmentation # IDH status # Low ADC Peak # Subventricular Zone (SVZ)

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)

Algorithm

• Passed 2022 Kakao Blind Recruitment Algorithm Code Test