Sibeen Kim

✉ bioceo78@korea.ac.kr | 🏠 https://sibisibi.github.io | ⭐ https://github.com/sibisibi

RESEARCH INTERESTS

Deep Reinforcement Learning

EDUCATION

Korea University   Mar 2018 - Feb 2025
B.S. in Biomedical Engineering, GPA: 3.70 / 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

[J3] **Sibeen Kim***, Inkyum Kim*, Sangmin Han, Chunghyo Kim, Wuntak Yeo, Yongsan Ko, Yeonhwa Lee, Wonwoo Cho, Sung Bae Park. "Towards accurate prediction of vertebral collapse after osteoporotic vertebral compression fracture via deep neural network and biomedical vision-language foundation models with multimodal dataset", *In Preparation*, 2024

[J2] Yaewon Park, Geon Jang, **Sibeen Kim**, Kyunghwa Han, Nayoung Shin, Sungsoo Ahn, Jonghee Chang, Sehoon Kim, Rajan Jain, Seungkoo Lee. "Leptomeningeal Metastases in IDH-wildtype Glioblastomas Revisited: Comprehensive Analysis of Incidence, Risk Factors, and Prognosis Based on Postcontrast FLAIR Imaging", *In Submission to Neuro-Oncology*, 2024

[J1] Chaejung Park*, Seohee Choi*, Dain Kim, **Sibeen Kim**, Kyunghwa Han, Sungsoo Ahn, Wonhee Lee, Eunchang Choi, Kichang Keum*, Jinna Kim*. "MRI radiomics may predict early tumor recurrence in patients with sinonasal squamous cell carcinoma", *European Radiology*, 2023

WORK EXPERIENCE

Letsur   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

GT-OMOP: Adapting Graph Transformers for OMOP-CDM   Mar 2024 - Present
EHR # Graph Transformer # OMOP-CDM # Foundation Model

FL-PoST   Dec 2023 - Present
Federated Learning # Segmentation # Glioblastoma

Neuro-QAI: Adaptive Learning in Noisy Label Environments   Dec 2023
Q-Learning # Neuroimmune System # Noisy label

Optimizing Training Procedures for UNet-Based Brain Tumor Segmentation   Dec 2023
nnUNet # 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