# Sibeen Kim

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### RESEARCH INTERESTS

Deep Reinforcement Learning

#### **EDUCATION**

Mar 2018 - Feb 2025Korea University

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

School for Gifted Students in Science

Mar 2015 - Feb 2018

#### 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
- $[\mathbf{J1}] \ \ \mathbf{Chaejung} \ \mathbf{Park^*}, \mathbf{Seohee} \ \mathbf{Choi^*}, \mathbf{Dain} \ \mathbf{Kim}, \mathbf{Sibeen} \ \mathbf{Kim}, \mathbf{Kyunghwa} \ \mathbf{Han}, \mathbf{Sungsoo} \ \mathbf{Ahn}, \mathbf{Wonhee} \ \mathbf{Lee}, \mathbf{Eun-lee} \ \mathbf{Kim}, \mathbf{Kyunghwa} \ \mathbf{Han}, \mathbf{Sungsoo} \ \mathbf{Ahn}, \mathbf{Wonhee} \ \mathbf{Lee}, \mathbf{Eun-lee} \ \mathbf{Kim}, \mathbf{Kyunghwa} \ \mathbf{Han}, \mathbf{Sungsoo} \ \mathbf{Ahn}, \mathbf$ chang Choi, Kichang Keum\*, Jinna Kim\*. "MRI radiomics may predict early tumor recurrence in patients with sinonasal squamous cell carcinoma", European Radiology, 2023

### WORK EXPERIENCE

Jan 2024 - Present Letsur

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)

Jan 2024 - Mar 2024 KAIST AI

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

B-ICT Lab

Research Intern (Advisor: Jounghwan Mun, Ahnryul Choi)

Feb 2016 - Aug 2017

• 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 # Neuro immune System # Noisy label

Optimizing Training Procedures for UNet-Based Brain Tumor Segmentation

Dec 2023

#nn<br/>UNet # BraTS18 # Gaussian KDE<br/> # 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