Inhyeok Taylor Baek

Education

Seoul National University

March 2020-Present

Republic of Korea Expected graduation: February 2030

Doctor of Medicine

B.S. in Mathematical Sciences Cumulative GPA: 4.01/4.30

Research Experience

Innovative Radiology AI Laboratory

July 2024-Present

Seoul National University Hospital

- · Developing a chest X-ray report generation model.
- · Developing a chest CT report error detection model.

Functional Neuroanatomy of Metabolism Regulation Lab

July 2021-August 2022

Seoul National University College of Medicine

· Participated in the analysis of animal behavioral experiment data using DeepLabCut, a deep learning library for markerless pose estimation. Developed behavioral indices measuring goal-directed eating behaviors.

Research Grants

· Han Man-Chung Research Grant

May 2025-April 2026

Development and Evaluation of Large Language Models for Chest CT Report Error Detection

KRW 2,000,000

Publications

- · Hypothalamic neuronal activation in non-human primates drives naturalistic goal-directed eating behavior. Ha, L.J.*, Yeo, H.-G.*, Kim, Y.G.*, Baek, I.*, Baeg, E.*, Lee, Y.H., Won, J., Jung, Y., Park, J., Jeon, C.-Y., Kim, K., Min, J., Song, Y., Park, J.-H., Nam, K.R., Son, S., Yoo, S.B.M., Park, S., Choi, W.S., Lim, K.S., Choi, J.Y., Cho, J.-H., Lee, Y., and Choi, H.J. *Neuron*, 2024.
- · Development of an assessment method for freely moving nonhuman primates' eating behavior using manual and deep learning analysis. Ha, L.J.*, Kim, M.*, Yeo, H.-G.*, Baek, I., Kim, K., Lee, M., Lee, Y., and Choi, H.J. *Heliyon*, 2023.
- Lateral hypothalamic leptin receptor neurons drive hunger-gated food-seeking and consummatory behaviours in male mice. Lee, Y.H.*, Kim, Y.-B.*, Kim, K.S.*, Jang, M.*, Song, H.Y., Jung, S.-H., Ha, D.-S., Park, J.S., Lee, J., Kim, K.M., Cheon, D.-H., Baek, I., Shin, M.-G., Lee, E.J., Kim, S.J., and Choi, H.J. *Nature Communications*, 2023.

*: Equal contribution

Awards and Scholarships

- · Silver award, University Students Contest of Mathematics (2024)
- · Silver award, University Students Contest of Mathematics (2023)
- · 4th place, SNU Bundang Hospital ICU Datathon (2023)
- · Performance-based scholarship from SNU Project Group for Education and Research in Medical AI (2023)

Skills

Languages Korean (native), English

Programming languages Python (experienced with PyTorch)

Tools LATEX