**Name**

Bongsung Bae, M.S./Ph.D. student

**Contact Information**

Computational Systems Biology Lab.

School of Electrical Engineering and Computer Science (EECS)

Gwangju Institute of Science and Technology (GIST)

123 Cheomdangwagi-ro, Buk-gu, Gwangju, 61005, Republic of Korea

Mobile : +82-10-2429-5412

Office : +82-62-715-2287

E-mail : bsbae402@gist.ac.kr

**Research Areas**

Computational Biology, Cheminformatics, Artificial intelligence applications in Chemistry, Deep generative modeling, Reinforcement learning

**Education**

(SEP 2015 - FEB 2018) B.S. in Computer Science, Stony Brook University, New York, U.S.

(MAR 2019 - present) M.S./Ph.D. student in Electrical Engineering and Computer Science, Gwangju Institute of Science and Technology, Gwangju, Republic of Korea

**Publications(Peer Reviewed)**

Hyunho Kim, Eunyoung Kim, Ingoo Lee, Bongsung Bae, Minsu Park, Hojung Nam\*, "Artificial Intelligence in Drug Discovery: A Comprehensive Review of Data-Driven and Machine Learning Approaches", *Biotechnology and Bioprocess Engineering*, 2020;25(6):895-930.

 - The 2023 BBE best article award (OCT 2023)

Bongsung Bae, Haelee Bae, Hojung Nam\*, "LOGICS: Learning optimal generative distribution for designing de novo chemical structures", *Journal of Cheminformatics* 2023 Sep 7;15(1):77. doi: 10.1186/s13321-023-00747-3.

**Conferences/Presentations**

Bongsung Bae, Hojung Nam\*, "LOGICS: a framework for Learning Optimal Generative distribution Iteratively for the focused Chemical Structures", *ISMB 2022*, Madison, Wisconsin, USA, July 10-14, 2022 (poster)

**Skills**

Python programming for deep learning (PyTorch), statistical data analysis, cheminformatics software programming

**Activity & awards**

(2019 - 2024) Full government scholarship (M.S./Ph.D. program).