Songyeon Lee

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Education

Mar. 2020 ~ Present	Ph.D. Student in School of Electrical Engineering and Computer Science, Gwangju Institute of Science and Technology Gwangju, Korea
Mar. 2018 ~ Feb. 2020	M.S. in School of Electrical Engineering and Computer Science, Gwangju Institute of Science and Technology Gwangju, Korea Thesis: Breast Cancer Biomarker Identification via Metabolomics Data
Mar. 2014 ~ Feb. 2018	B.S. in Division of ICT Convergence Engineering, Sookmyung Women's University Seoul, Korea Thesis: Implementation of Linux Apache Web Server Attack Detection Program through Real-time Log Analysis

Research Interests

- Bioinformatics
- Cancer Target and Biomarker Identification
- Multi-omics Analysis
- Machine Learning and Deep Learning

Publications (Peer Reviewed)

Songyeon Lee, Byung-Joon Seung, In Seok Yang, Jueun Lee, Taewoong Ha, Hee-Myung Park, Jae-Ho Cheong, Sangwoo Kim, Jung-Hyang Sur, Geum-Sook Hwang*, Hojung Nam*, "1H NMR based urinary metabolites profiling dataset of canine mammary tumor", Scientific Data. volume 9, Article number: 132 (2022).

Hansol Lee, Songyeon Lee, Ingoo Lee, Hojung Nam*, "AMP-BERT: Prediction of Antimicrobial Peptide Function Based on a BERT Model." Protein Science (2022): e4529.

Conferences / Presentations

2023	Songyeon Lee, Hojung Nam, “Synthetic lethality prediction via attentive knowledge graph neural network in the divergent human cancer cell-lines”, BIOINFO 2023, Yeosu, Korea, Nov 13-15, 2023 (Poster presentation)

Projects

Mar. 2018 ~ Jan. 2021	**Development of non-invasive human-companion animal cancer common diagnostics based on multi-omics analysis** • National Research Foundation of Korea • Participating Researcher
Mar. 2022 ~ Dec. 2022	**Research on Electrical Engineering and Computer Science for Future Intelligence Information Society** • GIST Research Project • Participating Researcher
Mar. 2023 ~ Dec. 2023	**ICT convergence research for future society** • GIST Research Project • Participating Researcher
Apr. 2023 ~	**Development of web-platform for high performance deep learning-based target and compound virtual screening** • National Research Foundation of Korea • Participating Researcher

Honors and Awards

2018 ~ 2023	Full Government Scholarship (Ph.D. program)
2022	Student Research Scholarship
2023	Best Poster Award, BIOINFO 2023

Technical Skills

Programming language: Python, R

Industry-specific skills

- Design: Adobe creative apps (Adobe Photoshop, Illustrator, Premier)