Curriculam Vitae

Hyunho Kim

Personal Information

Nationality:	Republic of Korea
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Educations

Mar, 2018 - Present	Ph.D. Student in Electrical Engineering and Computer Science (GPA: 4.45/4.5) at Gwangju Institute of Science and Technology (**GIST**) Gwangju, Republic of Korea
Mar, 2010 - Feb, 2017	B.S. in Computer Science and Electrical Engineering (GPA: 4.0/4.5, Cum Laude) at **Handong Global University**, Pohang, Republic of Korea

Work Experiences

April, 2022 - Present	Visiting graduate student at University of California, San Diego (**UCSD**)
Jul, 2012 - Jan, 2015	Computer Teacher* at Kabutare TSS, Rwanda Korea International Cooperation Agency (**KOICA**) *Alternative military service

Research Areas

- Bioinformatics and cheminformatics
- AI-based computational methods for drug discovery
  (ADMET property prediction and optimization, etc.)
- Machine learning and deep learning.

Publications (Peer Reviewed)

Hyunho Kim, Minsu Park, Ingoo Lee, Hojung Nam, “BayeshERG: A Robust, Reliable, and Interpretable Deep Learning Model for Predicting hERG Channel Blockers", Briefings in Bioinformatics 2022 Jun 17;bbac211. doi: 10.1093/bib/bbac211.

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.

Hyunho Kim, Hojung Nam, "hERG-Att: Self-Attention-Based Deep Neural Network for Predicting hERG Blockers", Computational Biology and Chemistry, 2020 May 19;87:107286.

Conferences/Presentations

2022	Hyunho Kim**,** Minsu Park, Hojung Nam, **"**BayeshERG: A Robust, Reliable, and Interpretable Deep Learning Model for Predicting hERG Channel Blockers**",** RECOMB 2022, La Jolla, U.S., May 22-25, 2022 (Poster presentation)
2020	Hyunho Kim**,** Hojung Nam, **"**hERG-Att: Self-Attention-Based Deep Neural Network for Predicting hERG Blockers**",** APBC 2020, Seoul, Republic of Korea, Aug 18-20, 2020 (Oral Presentation)
2019	Hyunho Kim**,** Hojung Nam, **"**hERG-Att: Self-Attention-Based Deep Neural Network for Predicting hERG Blockers**",** 3rd Global Pharma R&D informatics & AI Congress, London, United of Kingdom, Oct 28-29, 2019 (Poster presentation)

Projects

May, 2021 - Nov 2021	National R&D Real Challenge Program (Team leader) Project name: Development of AI-based Drug Discovery Accelerating System

Honors and Awards

2018-2022	Full Government Scholarship (Ph.D. program)
Dec 2019	EECS Best Poster Award, GIST
Dec 2020	Outstanding Ph.D. Student RA Scholarship, GIST

Technical Skills

Programming skills (Matlab, Python)

Machine learning and Deep learning skills (Keras, Tensorflow, PyTorch, Scikit-learn, etc.)

Chemical data processing (RDkit)

Languages

Korean: Native

English: Proficient

Last modified: June 23, 2022