Hyunho Lee

E-mail: hlee401@asu.edu, hyunho@kwater.or.kr / Website: https://hyunholee26.github.io/

RESEARCH INTERESTS

Deep learning model using remote sensing images for the water resources management

Spatiotemporal data mining for the water resources management

GeoAI and Spatial data science

EDUCATION

Ph.D. Geographic Information Science   **Aug. 2022 – Present**
Arizona State University   *Tempe, United States*
Advisor: Prof. Wenwen Li

M.S. Computer Science   **Mar. 2008 – Feb. 2010**
KAIST (Korea Advanced Institute of Science and Technology)   *Daejeon, Republic of Korea*
Thesis: The layer-based vector texture for 3D rendering
Advisor: Prof. Kwangyun Wohn

B.E. Information and Computer Engineering   **Mar. 2001 – Aug. 2007**
Ajou University   *Suwon, Republic of Korea*

PUBLICATIONS

[1] J Park, **H Lee** (2020). Prediction of high turbidity in rivers using LSTM algorithm. *Journal of Korean Society of Water and Wastewater*, 34(1), 35-43. https://doi.org/10.11001/jksww.2020.34.1.035

[2] J Park, **H Lee**, CY Park, S Hasan, TY Heo, WH Lee (2019). Algal morphological identification in watersheds for drinking water supply using neural architecture search for convolutional neural network. *Water*, 11(7), 1338. https://doi.org/10.3390/w11071338

[3] M Park, Y Yoon, **H Lee**, J Kim (2018). Application of recurrent neural network for inflow prediction into multi-purpose dam basin. *Journal of Korea Water Resources Association*, 51(12), 1217-1227. https://doi.org/10.3741/JKWRA.2018.51.12.1217

WORK EXPERIENCE

Senior Manager, Digital Water Platform Dept., *K-water*   Jan. 2021 – Jun. 2022

Manager, Digital Innovation Dept., *K-water*   Jan. 2020 – Dec. 2020

Manager, Data Center Dept., *K-water*   Jan. 2019 – Dec. 2019

Manager, Water Data Collection and Analysis Dept., *K-water*   Jan. 2018 – Dec. 2018

Manager, Human Resources Management Dept., *K-water*   Jan. 2013 – Dec. 2017

Staff, Information System Management Dept., *K-water*   Jul. 2010 – Dec. 2012

TEACHING EXPERIENCE

In-house Instructor, Data Analysis with R programming, *K-water*	Apr.2018 – May.2021
Teaching Assistant, Introduction to Programming (CS101), *KAIST*	Mar. 2009 – Jul.2009

HONORS AND AWARDS

1st Place, 5th Bigdata analysis competition, *K-water*	Oct. 2021
Academic Conference Paper Award, Korean Society of Environmental Engineering Annual Conference	Nov. 2020
12th Place*, ACM-ICPC (International Collegiate Programming Contest) Asia-Seoul Regional	Nov. 2003

CERTIFICATION

Advanced Data Analytics Professional, *certificated by K-Data, Republic of Korea* (Pass rate: 2.76%)	Apr. 2019

MOOC'S – ONLINE CERTIFICATION

Artificial Intelligence and Machine Learning, *KAIST (K-MOOC)*	Jan. 2018 – Feb. 2018
Mathematical Fundamentals for Data Science, *Korea University (K-MOOC)*	Oct. 2017 – Jan. 2018
Machine Learning, *ColumbiaX (EDX)*	Jan. 2017 – Apr. 2017

PROFESSIONAL SKILLS

Programming Languages	Python, R, C/C++, JAVA, ABAP (SAP)
Data Science and Machine Learning	PyTorch, Keras, Tensorflow, Sci-kit Learn
Visualization	Matplotlib, Plotly, Leaflet, QGIS, OpenGL