# JaeHwi Kim

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#### **EDUCATION**

Mar. 2014 ~ Feb. 2021	Changwon National University School of Civil, Environmental and Chemical Engeineering	Changwon, Korea
	B.S. in Civil, Environmental and Chemical Engeineering GPA: 3.77 / 4.5	
Mar. 2021 ~ Feb. 2023	Changwon National University School of Civil, Environmental and Chemical Engeineering	Changwon, Korea
	Thesis: Characterization of dynamic site properties in the Gimhae Plains using the Microtremor Array Method and the Horizontal-to-Vertical Spectral Ratio method Advisor: Seokho Jeong	
	M.S. in Civil, Environmental and Chemical Engeineering GPA: 4.44 / 4.5	

#### **RESEARCH INTERESTS**

- Geophysical exploration
- Ground motion simulation
- Seismic hazard assessment
- Probabilistic seismic hazard analysis
- Seismic site effects

## **PUBLICATIONS (INTERNATIONAL)**

- Jaehwi Kim, Giseok Heo, Dongyoup Kwak, Seokho Jeong, "The Relationship between Bedrock Depth and Site Fundamental Frequency in the Nakdonggang Delta Region, South Korea", GEOTECHNICS, (2023)
- 2. Giseok Heo, **Jaehwi Kim**,seokho Jeong,Dongyoup Kwak, "Evaluation of SPT N and Vs models depending on geologic attributes: case study at Busan, South Korea", *GEOTECHNICS*, (2023)

# **PUBLICATIONS (DOMESTIC)**

1. **JaeHwi Kim**, Seokho Jeong, "Characterization of Deep Shear Wave Velocity Profiles in the Gimhae Plains Using the Microtremor Array Method", Journal of the Korean geotechnical society v.38 no.8, (2022)

### **CONFERENCES**

- JaeHwi Kim, Seokho Jeong, "Estimation of velocity structures in the Gimhae Plains using horizontal-to-vertical spectral ratios from microtremors", KGS Fall National Conference, Seoul, Korea (Oct. 2021) - Oral
- Seokho Jeong, JaeHwi Kim, "Characterization of shear wave velocity in the Gimhae Plains using the Microtremor Array Method", KGS Spring National Conference, Seoul, Korea (Mar. 2022)
- JaeHwi Kim, Seokho Jeong, "Characterization of dynamic site properties in the Gimhae Plains
  using the Microtremor Array Method and the Horizontal-to-Vertical Spectral Ratio method",
  QuakeCoRE Annual Meeting, Napier, New Zealand (Aug. 2022) Poster
- 4. S.Bae, S.Jeong, **J.Kim**, K.Kim, "Broadband Physics-based strong ground motion simulations for the southern Korean Peninsula", QuakeCoRE Annual Meeting, Napier, New Zealand (Aug. 2022)
- 5. Seokho Jeong, Sung Bae, **JaeHwi Kim**, Kwangyoung Kim, "Prediction of ground motion in South Korea based on physics-based broadband simulation", SCEC Annual Meeting, Palm Springs, United States (Sep. 2022)
- 6. **JaeHwi Kim**, Seokho Jeong, "A shear wave velocity model of Gimhae Plains sediments based on the Microtremor Array Method", KSCE 2022 Convention, Busan, Korea (Oct. 2022) Oral
- 7. S.Jeong, S.E. Bae, **J.H. Kim**, B.A. Bradley, "Prediction of ground motion in South Korea based on hybrid broadband ground motion simulation", IUGG 2023, Berlin, Germany (Jul. 2023)
- 8. **JaeHwi Kim**, seokho Jeong, "Site effect assessment of the Late-Quaternary sediments in the Nakdonggang delta region using HVSR and MAM techniques", 2023 Busan/Ulsan/Gyeongnam Brance Convention of Korean Society of Civil Engineers, Busan, Korea (Sep. 2023) Oral
- 9. **JaeHwi Kim**, Junsu Oh, seokho Jeong, "Site effect assessment of the Nakdonggang delta sediments using a depth-dependent shear wave velocity model", 2023 Earthquake Engineering Society of Korea Workshop, Jeju-do, Korea (Sep. 2023) Oral

### **SKILLS AND TECHNIQUES**

- Programming Language: Python (Basemap, Scipy, Obspy)
- Geophysical Software (Geopsy, Dinver, PySeismoSoil, DEEPSOIL)
- Geophysical Exploration (HVSR, Surface wave inversion)