

# Xiaojuan Qian

Postdoctoral researcher, Coastal Hydrodynamics Lab, Korea University  
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## EDUCATION

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**Korea University**, Seoul, Republic of Korea Sep. 2019 — Aug. 2025  
Ph.D. in Civil, Environmental and Architectural Engineering

**Zhejiang Ocean University**, Zhejiang, China Sep. 2015 — June. 2019  
Bachelor of Engineering: Harbors, Water Channels and Coastal Engineering

## EMPLOYMENT

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**Korea University**, Seoul, Republic of Korea Sep. 2025 — Now  
Postdoctoral researcher

## RESEARCH SCOPE

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### Interests

Hydrodynamics Process, Tropical Cyclone, Compound Flood, Typhoon Rainfall, Hydrological Response

### Topics

- The Effect of Typhoon Movement and Coastal Geometry on Storm Surge Risk
- Stochastic Generation of Tropical Cyclone Rainfall
- Examining the Role of Tropical Cyclone Motion in Coastal Compound Flooding
- Long-term Trend on Hydrological Characteristics of Basin

## PUBLICATIONS

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### Journal Papers

- **Qian, Xiaojuan**, Hwang, Sooncheol, & Son, Sangyoung. (2024). A Study on Key Determinants in Enhancing Storm Surges Along the Coast: Interplay Between Tropical Cyclone Motion and Coastal Geometry. *Journal of Geophysical Research: Oceans*, 129(2), e2023JC020400.
- Youn,Jihyeon., Hwang, Sooncheol, **Qian, Xiaojuan**, Im, Sehyuk., & Son, Sangyoung (2026). A Random Forest-based Method for Reconstructing Pressure Fields in Tropical Cyclones from Wind Data. *Atmospheric Research*, 330, 108588.
- **Qian, Xiaojuan**, et al. (2018). Preliminary Study on the Sediment Transportation under the Second Phases of the Reclamation and Training Projects in the Bodaozui of Zhoushan. *IOP Conference Series: Earth and Environmental Science*, 191(1).

### Selected Conference Proceedings

- **Qian, Xiaojuan**, & Son, Sangyoung (2025). Examining the Role of Tropical Cyclone Rainfall Motion in Coastal Compound Flooding. *Coastal Engineering Proceedings*, (38), management.227.
- **Qian, Xiaojuan**, & Son, Sangyoung (2023). The Effect of Tropical Cyclones' Translation Speeds and Landfall Angles on Maximum Surge Heights Along Idealized Coasts. *Coastal Engineering Proceedings*, (37), management.127.
- Son, Sangyoung, & **Qian, Xiaojuan**. (2023). On the effect of tropical cyclones' translation speed and landfall trajectory on the storm surge dynamics (EGU23-16745). *EGU23*. Copernicus Meetings.

## HONORS & AWARDS

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<b>IPESK Next Generation Researcher</b>	Sep. 2025
Institute for Promotion of Engineering and Science of Korea (IPESK)	Korea
<b>Excellence Award, Future Marine Science and Technology Award</b>	May. 2025
The Korean Association of Ocean Science and Technology Societies	Busan, Korea
<b>Best Paper Awards</b>	Feb. 2025
Korean Society of Coastal and Ocean Engineers	Seoul, Korea
<b>KU-Hydro Jr. Fellow</b>	May. 2024
School of Civil, Environmental and Architectural Engineering, Korea University	Seoul, Korea
<b>BK21FOUR KU-GAG Scholarship</b>	Feb. 2024
Office of Graduate School, Korea University	Seoul, Korea
<b>Outstanding KU-ACE Student Award</b>	Dec. 2023
School of Civil, Environmental and Architectural Engineering, Korea University	Seoul, Korea
<b>Foreign Natural Science and Engineering Scholarship</b>	Mar. 2020 — June. 2022
Graduate School, Korea University	Seoul, Korea
<b>Best Presentation Awards</b>	June. 2021
Korea Water Resources Association	Kwangju, Korea
<b>Best Paper Awards</b>	Dec. 2020
Water Engineering Conference, Korea University	Seoul, Korea

## ACADEMIC PRESENTATIONS

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### Oral presentation

- APAC 2025 (International Conference on Asian and Pacific Coasts), Busan, Korea Nov. 2025
- Joint Conference of The Korean Association of Ocean Science and Technology Societies, Busan, Korea May. 2025
- 7th Water Engineering Conference, Korea University, Korea Nov. 2024
- International Conference on Coastal Engineering, Sydney, Australia Dec. 2022
- EGU23 General Assembly, European Geosciences Union, online Apr. 2023
- 2023 Future-shaping ACE Congress, Korea University Nov. 2023
- Korean Society of Hazard Mitigation Conference, Online Sep. 2021
- Korean Water Resources Association Conference, Kwangju, Korea June. 2021
- 5th Water Engineering Conference, Online, Korea University, Korea Dec. 2022
- 4th Water Engineering Conference, Online, Korea University, Korea Dec. 2021
- 3rd Water Engineering Conference, Online, Korea University, Korea Dec. 2020

**Poster**

- 6th Water Engineering Conference, Online, Korea University, Korea Dec. 2023
- Korean Wetlands Society Annual Conference, Munkyung, Korea Nov. 2021