Jin Ikeda, Ph.D.

Research Scientist
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Professional Preparation

2019: Ph.D. Civil Engineering, University of Texas at San Antonio, Texas, USA

2014: MSc Engineering in the Coastal Environment, University of Southampton, UK

2010: M.S. Civil Engineering, Chuo University, Tokyo, Japan **2008:** B.S. Civil Engineering, Chuo University, Tokyo, Japan

Appointments and working experience

2021 - Present: Research Scientist (IT Analyst), LSU Center for Computation and Technology

2019 – 2021: Post-Doctoral Research Associate, LSU Center for Coastal Resiliency

2010 – 2013: Coastal and marine engineer, TOKO Engineering Consultants, Ltd., Japan

Expertise and Experience

Jin's research focus is the interactions between coastal hydrodynamics and sediment dynamics on sandy and muddy coasts. His research topic is also morphological changes on the northern Gulf and Atlantic coasts, such as coastal erosion and shoreline protections due to coastal vegetation (e.g., salt marshes). His recent interest is to better understand coastal dynamics on the coastal-land margins in response to climate drivers (e.g., climate change and sea-level rise). With the knowledge of fluid-structure interaction, Jin is working on estimating future wave attenuation functions on salt-marsh coastlines in the northern Gulf of Mexico using simulation results of hydrodynamic and ecological responses to sea-level rise. This work helps our understanding of coastal ecosystems and their responses to future climate forcing.

Publications (Relevance)

- 1. **Ikeda, J.**, Okamoto, H., and Mizuguchi. M. (2010) 'Laboratory Study on Waves and Sediment Transport near Swash Zone by the Combined Short and Long Waves' Journal of *Japan Society of Civil Engineers Ser. B2 (Coastal Engineering)*, 66(1), pp. 426-430, Available at: https://www.jstage.jst.go.jp/article/kaigan/66/1/66_1_426/_pdf [Abstract in English, body text in Japanese]
- 2. **Ikeda, J.** and Testik, F.Y. (2019) 'Morphodynamics of beach-cliff systems in the Santa Barbara littoral cell'. *Ocean Engineering*, *172*, pp.350-360, Available at: https://www.sciencedirect.com/science/article/pii/S0029801818321164
- 3. **Ikeda, J.** and Testik, F. Y. (2020) 'Propagation, deposition, and suspension characteristics of constant-volume particle-driven gravity currents.' *Environmental Fluid Mechanics*, 21(1), pp.1-32, Available at: https://doi.org/10.1007/s10652-020-09756-4
- 4. **Ikeda, J.**, Bacopoulos, P., Wilson, B., Bilskie, M.V., Ozdemir C.E., and Hagen, S.C. (2021) Evaluating hydrodynamics and potential sediment transport due to tidal restoration of an impounded estuarine system, (in *preparation* to be submitted to Journal of Ecohydraulics)
- 5. Testik, F. Y., Saha, R., and **Ikeda, J.** (2021) Beach Response and Recovery from Hurricane Harvey near Corpus Christi, Texas within a Historical Context, (in *preparation*)