

# Jianyong HE

## CONTACT

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AFFILIATION: School of Naval Architecture, Ocean & Civil Engineering,  
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HOMEPAGE: <https://jianyonghe.github.io/>

## WORK EXPERIENCE

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JUL 2021 - PRESENT	School of Naval Architecture, Ocean & Civil Engineering, Shanghai Jiao Tong University I am a Research Assistant at the Department of Engineering Mechanics, my main work is to be responsible for some experimental platforms construction and instruments debugging.
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## EDUCATION

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SEP 2018 – JUN 2021	<b>Zhejiang University (ZJU)</b> , Hangzhou, China M.Phil., Naval Architecture and Ocean Engineering Thesis: <i>Numerical Investigation on Flow Behaviors and Vortex-Induced Vibration of a Catenary Curved Riser</i>
SEP 2014 – JUN 2018	<b>China University of Petroleum (UPC)</b> , Qingdao, China B.E., Naval Architecture and Ocean Engineering Thesis: <i>Study on Design of Sinker for Flexible Submarine Pipeline</i>

## PUBLICATIONS

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- 1 Gao, Y., **He, J.**, Ong, M. C., Zhao, M., & Wang, L. (2021). Three-Dimensional Numerical Investigation on Flow Past Two Side-by-Side Curved Cylinders. *Ocean Engineering*, 234, 109167.
- 2 **He, J.**, Gao, Y., Wang, L., Wo E., & Zhang, Z. (2021). Three-Dimensional Numerical Simulation of Flow Past a Catenary Riser. *The Ocean Engineering*, 39(5):119-134. (in Chinese)

## PATENTS

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- 1 Guo, C., Gao, Y., Chen, W., **He, J.**, & Zhu, J. (2021). An Experimental Device and Method for Studying The Dynamic Response and Flow Field Characteristics of Anchor Chain Under Cyclic Motion. (Granted) CN111122142A

2 Guo, C., Gao, Y., Chen, W., Zhu, J., & He, J. (2021). An Experimental device for studying dynamic response and flow field characteristics of anchor chain cycle motion. (Granted) CN211784223U

## RESEARCH EXPERIENCE/PROJECTS

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JAN 2019 – DEC 2020	<p>Research on Basic Coupling Dynamic Response and Catastrophic Mechanism of Fixed Wind Power Pipe Frame in Deep Sea</p> <p>The experiment of flow field visualization of the risers was carried out in precision water tank, and the wake field of the structure was analyzed by particle image speed measurement technology.</p>
MAR 2019 – JUN 2020	<p>Disaster Mechanism, Monitoring and Prevention Technology of Typical Offshore Landslides</p> <p>The shallow hydration process of wave propagation and the dynamic effect on the terrain were analyzed through physical experiments.</p>
APR 2019 – DEC 2019	<p>Assessment of The Health Status of Typical Terminals in Active Service of Zhejiang Seaport Group</p> <p>The numerical analysis of the scouring behind the pier was carried out by FLOW-3D, and the flow field change of the rear of the pier under the influence of different arrangements of the diversion embankment was studied, and the force of the pile foundation was analyzed.</p>
SEP 2018 – DEC 2019	<p>Investigation and Assessment of The Impact of Sea Level Change in Zhejiang Province, China</p> <p>The erosion of the shore beach embankment in the coastal area of Zhejiang was measured, the information was collected and compared with the results of previous years, and the assessment report was written to provide a reference for the prevention of marine natural disasters and the restoration of the shore beach.</p>

## AWARDS & HONORS

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2018	Academic Scholarship, Zhejiang University
2017	Second Prize Scholarship, China University of Petroleum
2016	Third Prize Scholarship, China University of Petroleum
2016	Merit Student Title, China University of Petroleum

## SKILLS

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Extensive experience with C and Matlab  
Intermediate experience with C++, Python, Fortran,

Familiar with HTML/CSS, Linux shell

## **LANGUAGES**

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English (Professional Proficiency), Mandarin (Native Proficiency)