

**Jun Cheng**  
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## **EDUCATION**

University of South Florida (Tampa, FL)

Ph.D. in Geology, 2015

Dissertation: Multiple Scale of Beach Morphodynamic Processes: Measurements and Modelling

Major Professor: Dr. Ping Wang

Nanjing University (Nanjing, China)

M.Sc. in Physical Geography, 2009

Thesis: Growth Limit of Tidal Flat along the Coast of Jiangsu Province, China

Major Professor: Dr. Shu Gao

Nantong University, (Nantong, China)

B.Sc. in Geography

## **PROFESSIONAL EXPERIENCE**

01/2016 – Present	Postdoctoral Researcher School of Geosciences, University of South Florida
08/2014 – 12/2015	Research Assistant School of Geosciences, University of South Florida
08/2009 – 07/2014	Teaching Assistant Department of Geology, University of South Florida
09/2006 – 06/2009	Research Assistant School of Geographic and Oceanographic Sciences, Nanjing University, China

## **PUBLICATIONS**

### ***Peer-reviewed Journal Papers***

**Cheng, J.** and Wang, P., Accepted. Unusual Beach Changes Induced by Hurricane Irma with a Negative Storm Surge and Post-storm Recovery, *Journal of Coastal Research*.

Guo, Q., Pu R, Tapley, K., Li, J., **Cheng, J.**, Jiao, T. Accepted. Impacts of Coastal Development Strategies on Long-Term Coastline Changes: A Comparison between Tampa Bay, USA and Xiangshan Harbor, China, *Applied Geography*.

**Cheng, J.**, and Wang, P. (2018). Dynamic Equilibrium of Sandbar Position and Height along a Low Wave Energy Micro-tidal Coast, *Continental Shelf Research*, 165,120-136.

- Qian, P., Zheng, X.M., **Cheng, J.**, Han, Y.J., Dong, Y., Zhang, J.G. (2018). Tracing the provenance of Aeolian loess in the Yangtze River Delta through zircon U-Pb age and geochemical investigations. *Journal of Mountain Science*, 15 (4), 708-721.
- Guo, Q., Pu R. Li, J., **Cheng, J.** (2017). An Enhanced Normalized Difference Water Index for Water Extraction Using Satellite Remote Sensing Imagery. *International Journal of Remote Sensing*. 38 (19), 5430-5445.
- Guo, Q., Pu, R., **Cheng, J.** (2016). Anomaly detection from hyperspectral remote sensing imagery. *Geosciences* 6(4), 56.
- Cheng J.**, Wang, P., and Smith, R.E. (2016). Hydrodynamic Conditions Associated with an Onshore Migrating and Stable Sandbar. *Journal of Coastal Research* 32(1): 153-163.
- Cheng, J.**, Wang, P., and Guo. Q. (2016). Measuring Beach Profiles along a Low-Wave Energy Microtidal Coast, West-Central Florida, USA. *Geosciences*, 6 (4), 44.
- Cheng, J.** and Wang, P. (2015). Extracting Turbulence under Breaking Waves in the Surf Zone. *Journal of Waterway, Port, Coastal, Ocean Engineering*. (141)6:06015003-1-06015003-10.
- Pu, R., and **Cheng, J.** (2015). Mapping Forest Leaf Area Index Using Reflectance and Textural Information Derived from WorldView-2 Imagery in a Mixed Natural Forest Area in Florida, US. *International Journal of Applied Earth Observation and Geoinformation*. 42: 11-23.

## RESEARCH GRANT

**Cheng, J (PI)**, Chen, Y., Du, D, Lu, M., 2013-2014, Multivariate Nonlinear Modeling of Beach-Profile Evolution: a Case Study along Pinellas County coast, Florida (\$5000), Funded by the University of South Florida Graduate School.

## RESEARCH PROJECTS PARTICIPATED

RAPID: Emergency Field Investigation of Oil-Beach interaction along the Alabama and Florida Beaches Following the BP Deep water Horizon Oil Spill. Funded by National Science Foundation (Wang, P., PI, 2010-2011)

**My role was to assist in fieldwork documenting distribution of surficial and buried oil contaminants across sandy beaches.**

Inlet Management Study for Pass-A-Grille and Bunces Pass, Pinellas County, Florida. Funded by Department of Environmental Protection of Florida (Wang, P. PI, 2016-2017)

**I was in charge of field operations and numerical modelling.**

Physical Monitoring of the Sand Key and Treasure Island/Long Key Nourishment Projects.  
Funded by Pinellas County Florida (Wang, P. PI, 2012-2017, 2018-2023)  
**I am in charge of field operations and assisting in report writing.**

***Peer-reviewed book chapter***

Zhang, J.C., Dongdong Chu, D.D., Wang, P., Hughes, J., **Cheng, J.** (2016). Hydrodynamic Modelling of Salinity Variations in a Semi-Engineered Mangrove Wetland: The Microtidal Frog Creek System, Florida. *Contributions to Modern and Ancient Tidal Sedimentology: Proceedings of the Tidalites 2012 Conference.*

Wang, P., and **Cheng J.**, (2017). Storm Impacts on the Morphology and Sedimentology of Open Coast Tidal Flats, in: Ciavola, P. and Coco, G. (Eds.) Coastal Storms: from Forecasting to Prediction, Wiley

Wang, P., Stone, G., **Cheng, J.** (2017) Nearshore wave measurement. In Earth Sciences Series, Encyclopedia of Coastal Science, 2 Edition.

Wang, P., Li, C., **Cheng, J.** (2018) Open-Coast Tidal Flat Deposits. In Earth Sciences Series, Encyclopedia of Coastal Science, 2 Edition.

***Papers published in conference proceedings***

**Cheng, J.**, and Wang, P (2015). Measuring and Modeling Beach-Profile Response to Tropical Storm Debby, West-Central Florida. *Proceedings of Coastal Sediments 2015*, World Scientific Publisher.

Wang, P., **Cheng, J.**, Horwitz, M.H., and Legault, K.R. (2015). Comparing Two Numerical Models in Simulating Hydrodynamics and Sediment Transport at a Dual Inlet System, West-Central Florida. *Proceedings of Coastal Sediments 2015*, World Scientific Publisher.

**Cheng, J.**, Wang, P., Vallee, M.A., Longshore variation of sandbar morphodynamics under energetic conditions. *Proceedings of Coastal Sediments 2019*, World Scientific Publisher.

Wang P., **Cheng, J.**, Vallee, M.A., Management Study at Multiple Natural and Engineered Tidal Inlets, West-central Florida, USA. *Proceedings of Coastal Sediments 2019*, World Scientific Publisher.

Vallee, M.A., Wang, P., **Cheng, J.**, Regional Scale Morphological Changes of the Barrier Island at the Bay Entrance in Response to Engineering Activities in Tampa Bay. *Proceedings of Coastal Sediments 2019*, World Scientific Publisher.

Rodgers, M., Vallee, M, Wang, P., **Cheng, J.**, Measuring complex beach-dune morphology and nearshore processed using UAVs. *Proceedings of Coastal Sediments 2019*, World Scientific Publisher.

*Papers originally published in Chinese* (in Chinese with English abstract).

**Cheng, J.**, Gao, S., Wang, Y., and Min, F. (2009). Grain Size Characteristic of Surficial Sediments and Their Response to Hydrodynamics over the Coastal Waters of Northern Jiangsu Province. *Marine Geology & Quaternary Geology*