

# Kexin Song

## PERSONAL INFORMATION

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PhD student *E-mail:* kexin.song@uconn.edu  
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## EDUCATIONAL BACKGROUND

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09/2020 – present	PhD student	<b>University of Connecticut</b> <b>Department of Natural Resources and the Environment</b> Advisor: Prof. Zhe Zhu Project: Near Real-time Assessment of Forest Risk to Infrastructure Using Satellite Time Series
08/2020	M.S.	<b>University of Miami</b> <b>Rosenstiel School of Marine and Atmospheric Science (RSMAS)</b> Advisor: Prof. Peter J. Minnett Field of research: Satellite Remote Sensing, Arctic Sea Ice
06/2018	B.S.	<b>Ocean University of China (OUC)</b> Department of Marine Technology
02/2016 — 06/2016	Exchange	<b>National Taiwan Ocean University (NTOU)</b> Department of Communications, Navigation and Control Engineering

## INTERNSHIP EXPERIENCE

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### North China Sea Marine Forecasting Center of State Oceanic Administration, Qingdao

11/2017 — 12/2017 **Intern of Data & Information Service**  
Supervisor: Dr. Chengcheng Qian

- Extracted metadata of oceanic & meteorological datasets which are used in the weather forecast of the Bohai Sea and the Yellow Sea (Source: remote sensing, re-analysis and field observations)
- Compared the credibility and availability of various weather charts
- Compiled and Updated data description reports

### Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences (CAS), Beijing

06/2017 — 06/2018 **Undergraduate Research Assistant**  
Supervisor: Dr. Jin Sha and Dr. Xiaoming Li

Project Topic: Classification and Assessment of Water Types via MODIS Aqua Chlorophyll-a (Chl-a) Concentration around Hainan Island

- Analyzed MODIS/Aqua estimated Chl-a from Jul 2002 to Jun 2017 around Hainan Island
- Conducted water type classification and assessment based on Chl-a concentrations using K-means method
- Compiled data and wrote a report on the causes, trends and impacts of regional water quality

## RESEARCH EXPERIENCE

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### Master Research: Accuracy Assessment of Summertime Reanalysis and Passive Microwave Sea-ice Concentration (SIC) Products in The Central Arctic

- Assessed the accuracy of summer passive microwave and reanalysis SICs in the Central Arctic by using human-inspection, MODIS sea ice extent, and multi-product ensemble SIC fields

- Analyzed reanalysis SIC products' dependence on the input remote sensing SIC dataset
- Discussed the causes of SIC uncertainty, and simulating the effect of surface features to satellite received energy using targeted radiative transfer study

## **Student Research Developing Program (SRDP), OUC, Qingdao**

11/2015 — 11/2016

**Group Member**

Advisor: Dr. Yanzhen Gu

Project Topic: Establishment of Marine Remote Sensing Satellite Database

- Constructed modules of quick view images and information retrieval
- Drafted abstract, 1.2 Download and Quick View Data and 3.2 Query Tool of project paper, Wang D., Huang D., Liu H., Hu Y., Song K., Liu Z., (2017). Establishment and application of marine remote sensing satellite database. *Meteorological Hydrological and Marine Instrument*, 2017, 34(2): 40-45.

## **EXTRACURRICULAR ACTIVITIES**

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03/2020	Participant of the 2020 Unidata Users Workshop, University of North Carolina
08/2019	Participant of the Oceanhackweek, University of Washington, Seattle
08/2019	Participant of the NASA Summer School on Satellite Observations and Climate Models, California Institute of Technology, Pasadena
01/2019	Volunteer at Hempel World Cup Series for sailing, Miami
08/2018 – 12/2018	MPS student representative for the Graduate Academic Committee
04/2015 — 06/2015	Volunteer at Qingdao Fire Museum, Qingdao

## **HONORS & AWARDS**

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06/2018	Excellent Graduate Award, OUC
09/2017	Outstanding Student Award, OUC
07/2017	Outstanding Summer Camper, Second Institution of Oceanography, Hangzhou
04/2017	Honorable Mention of Interdisciplinary Contest in Modeling (ICM)

## **SKILLS**

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Computer	<ul style="list-style-type: none"> <li>➤ Fluent in: Microsoft Office, ArcGIS, ENVI, SPSS, Git, Tableau</li> <li>➤ Adept at: Python, Matlab, SQL</li> </ul>
Language	<ul style="list-style-type: none"> <li>➤ Mandarin Chinese as mother tongue</li> <li>➤ TOEFL 96 (Reading: 23, Listening: 23, Speaking: 24, Writing: 26)</li> </ul>