

# QUAN ZHOU

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## EDUCATION

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### McGill University

Sept 2020 -

Ph.D. student, the Desautels Faculty of Management, GPA: 3.83/4.0

**Major:** Operations Management

### Memorial University of Newfoundland

September 2011 - May 2014

M.Eng., Naval Architecture and Ocean Engineering, GPA: 4.0/4.0

**Thesis:** Simulation for Ship Maneuvering and Path Following in Level Ice.

### Shanghai Jiao Tong University

September 2007 - August 2011

B.Eng., Naval Architecture and Ocean Engineering, GPA: 3.33/4.0

**Thesis:** Different Control Methods of Ship Rolling Using Moving Mass System.

## PUBLICATIONS

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Ming Liu, Quan Zhou, Xin Wang, Cheng Yu, and Mengqi Kang. Voyage performance evaluation based on a digital twin model. In *IOP Conference Series: Materials Science and Engineering*, page 012027. IOP Publishing, 2020

Rongwu Yang, Jinsong Xu, Xin Wang, and Quan Zhou. Parallel trajectory planning for shipborne autonomous collision avoidance system. *Applied Ocean Research*, 91:101875, 2019

Quan Zhou, Heather Peng, and Wei Qiu. Numerical investigations of ship-ice interaction and maneuvering performance in level ice. *Cold Regions Science and Technology*, 122:36–49, 2016

Quan Zhou, Ming Liu, Heather Peng, and Wei Qiu. Experimental studies of hydrodynamic interaction of two bodies in waves. In *ASME 2015 34th International Conference on Ocean, Offshore and Arctic Engineering*. American Society of Mechanical Engineers Digital Collection, 2015

Quan Zhou and Heather Peng. Numerical simulation of a dynamically controlled ship in level ice. *International Journal of Offshore and Polar Engineering*, 24(03):184–191, 2014

Rongwu Yang, Liang Shen, and Quan Zhou. Research on active anti-rolling methods using moving mass system. In *Mechanical Engineering and Technology*, pages 175–184. Springer, 2012

## PRESENTATIONS

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Experimental studies of hydrodynamic interaction of two bodies in waves, International Conference on Offshore Mechanics and Arctic Engineering (OMAE), St. John's, Canada, 2015.

Numerical simulation of a dynamically controlled ship in level ice, International Offshore and Polar Engineering Conference (ISOPE), Anchorage, USA, 2013.

## EMPLOYMENT HISTORY

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### Seaste Marine System (Canada), Inc.

May 2017 - August 2020

*Co-founder, Engineer*

*Montreal, QC*

- developed an on-board intelligent route advisory system for ships (manager, core developer).

- developed an industrial ship position and heading control system (core developer).

### **Memorial University of Newfoundland**

February 2014 - May 2017

*Research and Project Engineer*

*St. John's, NL*

- developed a commercial ship-ice interaction simulator (team leader).
- conducted the experimental investigation of floating body interaction (team leader).

### **American Bureau of Shipping**

February 2013 - June 2013

*Intern, Harsh Environment Group*

*Houston, TX*

- reviewed and summarized the literature and regulations about ship safe speed in ice.
- developed the assessment toolbox and verified with sea trial data.

## **TEACHING HISTORY**

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### **Memorial University of Newfoundland**

September 2011 - May 2014

*Teaching Assistant*

*St. John's, NL*

- Marine Fluid Dynamics
- Marine Propulsion
- Dynamics and Maneuvering of Ocean Vehicles

## **AWARDS**

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FRQSC - Doctoral research scholarships, 2021

MSRC PhD Performance Award, 2021

CIBC Fellowship - Faculty of Management, 2020

Grad Excellence Award in Management, 2020, 2021

McGill PhD Program Award, 2020

Memorial University of Newfoundland Graduate Scholarship, 2011, 2012

Shanghai Jiao Tong University Best Thesis Award, 2011

Shanghai Jiao Tong University CCS Scholarship, 2010

Shanghai Jiao Tong University A-level Scholarship, 2009

## **QUALIFICATIONS**

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### **Languages**

Chinese (native), English (proficient)

### **Programming Languages**

Python, Matlab, C/C++, Qt

### **Databases**

MySQL, InfluxDB, SQLite