

# Mr. Chengxi Shen



## 1. Background

B.Sc., Wuhan University, 2008

M.Eng. Memorial University, May, 2013

## 2. Thesis and Supervisors

*The High Frequency Surface Wave Radar Cross Section for Ocean Swell: Derivation and Inversion*

• Supervisors: Dr. Weimin Huang & Dr. Eric Gill

## 3. Publication

- 1) W. Huang, R. Carrasco, C. Shen, E. W. Gill, J. Horstmann, "Surface Current Measurements Using X-band Marine Radar with Vertical Polarization", *IEEE Trans. Geosci.*, vol. 54, no. 5, pp. 2988-2997, 2016.
- 2) C. Shen, W. Huang, E. W. Gill, R. Carrasco, J. Horstmann, "An Algorithm for Surface Current Retrieval From X-band Marine Radar Images," *Remote Sens.*, vol. 7, no. 6, pp. 7753-7767, 2015.
- 3) C. Shen, W. Huang, and E. W. Gill, "Application of Polar-Current-Shell-Based Algorithm for Surface Current Extraction From Shipborne X-band Nautical Radar Images", *11<sup>th</sup> IEEE/OES CWTM*, St. Petersburg, USA, 2015.
- 4) C. Shen, W. Huang, and E. W. Gill, "An alternative method for surface current extraction from X-band marine radar images", *IEEE International Geoscience and Remote Sensing Symposium*, Quebec, Canada, pp. 4370-4373, 2014.
- 5) C. Shen, E. W. Gill, W. Huang, "HF Radar Cross Sections of Swell Contaminated Seas for a Pulsed Waveform", *IET Radar Sonar Navig.*, vol. 8, no. 4, pp. 382-395, 2014.
- 6) C. Shen, W. Huang, E. W. Gill, "The derivation of high frequency radar cross sections for swell contaminated seas", *IEEE International Geoscience and Remote Sensing Symposium*, Melbourne, Australia, 2013.

- 7) C. Shen, E. W. Gill, and W. Huang, “[Extraction of Swell Parameters from Simulated Noisy HF Radar Signals](#)”, *IEEE RadarCon'13*, Ottawa, Canada, 2013.
- 8) C. Shen, E. W. Gill, and W. Huang, “[Simulation of HF Radar Cross Sections for Swell Contaminated Seas](#)”, *Oceans '12 MTS/IEEE*, Hampton Roads, USA, 2012.
- 9) C. Shen, E. W. Gill, W. Huang, “[The shallow water HF radar cross sections for swell contaminated seas](#)”, *IEEE NECEC Conference*, Newfoundland, Canada, 2012.
- 10) S. Chen, W. Huang, C. Shen, “[Lessons learned from multi-clock designing of SpaceWire interface](#)”, *IEEE NECEC Conference*, Newfoundland, Canada, 2011.

#### **4. Award**

- Fellow of School of Graduate Studies