Ms. Shuyan Chen

1. ***Background***

B.Eng., Harbin Institute of Technology, 2010
M.Eng., Harbin Institute of Technology, 2012
PhD, Memorial University, May 2017

2. ***Thesis and Supervisors***

Ionospheric Clutter Models for High Frequency Surface Wave Radar

- Supervisors: Dr. Weimin Huang, Dr. Eric Gill

3. ***Publication***

1) S. Chen, E. W. Gill, and W. Huang, "A High Frequency Surface Wave Radar Ionospheric Clutter Model for Mixed-Path Propagation with Second-Order Sea Scattering," *IEEE Trans. Antennas Propag.*, vol. 64, no. 12, pp. 5373-5381, 2017.
2) S. Chen, W. Huang, and E. W. Gill, "First-Order Bistatic High Frequency Radar Power for Mixed-path Ionosphere-Ocean Propagation," *IEEE Geosci. Remote Sens.* Lett., vol. 13, no. 12, pp. 1940-1944, 2016.
3) S. Chen, E. W. Gill, and W. Huang, "A First-Order HF Radar Cross Section Model for Mixed-Path Ionosphere-Ocean Propagation with an FMCW Source," *IEEE J. Oceanic Eng.*, vol. 41, no. 4, pp. 982-992, 2016.
4) S. Chen, E. W. Gill, and W. Huang, "A Second-Order Monostatic High Frequency Radar Power Model for Mixed-path Propagation," *IEEE 17th International*

Symposium on Antenna Technology and Applied Electromagnetics, Montreal, Canada, 2016.

5) S. Chen, W. Huang, and E. Gill, "A Vertical Reflection Ionospheric Clutter Model for HF Radar Used in Coastal Remote Sensing," *IEEE Antennas Wireless Propag. Lett*., vol. 14, pp. 1689-1693, 2015.
6) S. Chen, W. Huang, E. W. Gill, "A Vertical Reflection Ionospheric Clutter Model for High Frequency Surface Wave Radar," *IEEE International Symposium on Antennas and Propagation*, Vancouver, Canada, 2015.
7) J. Walsh, E. Gill, W. Huang, and S. Chen, "On the Development of a High Frequency Radar Cross Section for Mixed Path Ionosphere-ocean Propagation", *IEEE Trans. Antennas Propag.*, vol. 63, no. 6, pp. 2655-2664, 2015
8) S. Chen, E. W. Gill, and W. Huang, "An Ionospheric Reflection Coefficient Model for HF Ionosphere-Ocean Propagation", *36th Canadian Symposium on Remote Sensing*, Newfoundland, Canada, 2015.
9) S. Chen, E. W. Gill, and W. Huang, "An Ionospheric Reflection Coefficient Model for Mixed-path Ionosphere-Ocean Propagation of High Frequency Radio Waves", *IEEE NECEC Conference*, Newfoundland, Canada, 2014.
10) S. Chen, W. Huang, E. W. Gill, "The first-order FMCW HF radar cross section for ionosphere-ocean propagation", *Oceans'14 MTS/IEEE*, St. John's, Canada, 2014.
11) J. Walsh, S. Chen, E. W. Gill, W. Huang, "High Frequency Radar Clutter Power for Mixed Ionosphere-Ocean Propagation", *16th International Symposium on Antenna Technology and Applied Electromagnetics,* Victoria, British Columbia, Canada, 2014.
12) S. Chen, E. Gill, and W. Huang, "The modelling of the ionosphere reflection coefficient for HF radar ionospheric clutter", *IEEE NECEC Conference,* Newfoundland, Canada, 2013.

4. ***Award***

- Emera Graduate Scholarship, Memorial University, 2015
- IEEE Antennas and Propagation Society Doctoral Research Award, 2015
- HONORABLE MENTION Award of Student Paper Competition, IEEE International Symposium of Antenna and Propagation, 2015
- Wally Read Best Student Paper Award, IEEE NECEC, 2014
- Fellow of School of Graduate Studies (to be awarded)