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 Department of Geography and Planning 4 X H H Q ¶ V 8 Q L Y H U V L W \  
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EDUCATION

- x Ph.D. Geography, San Diego State University/University of California at Santa Barbara, USA, 2001
- x M.S. GIS and Remote Sensing Application, Institute of Remote Sensing Applications, Chinese Academy of Sciences, Beijing, P.R. China, 1994
- x B.S. Economic Geography, Peking University, Beijing, P.R.China, 1991

EMPLOYMENT HISTORY

- x 2015 Full professor, ' H S D U W P H Q W R I \* H R J U D S K \ D Q G 3 O D Q Q L C
- x 2015 Cross

3. 2020-2022 CIHR Operating Grant Canadian 2019 Novel Coronavirus (COVID-19) Rapid Research Funding Spatial and social patterning of COVID-19 prevention and transmission in Canada: Investigating the impacts of risk perception and preventive behaviour on individuals at V S D F H ' 3 Wang, Ryerson Univ. (CAN\$189,050)
4. 2020-2023 Natural Resources Canada Research Affiliate Program 5 \$ 3 Towards accurate monitoring of habitat disturbances in Canada: Implementing an AI approach to continuously monitoring caribou habitat changes (Supervisor) (CAN\$63,000)
5. 2019-2024 NSERC Discovery \* U D Q Target based multiple scale change detection from time series remotely sensed environmental data (PI) (CAN\$215,000)
6. 2019-2025 NSERC CREATE SUR J U D P 3 / ( D G H U V L Q Z \$ W H U D Q ' Z D W ( 5 / ( \$ ' ( 5 6 3 U R M C A N \$ 1,650,000) (Co-PI, PI: B. R. Stephen at Chemistry)
7. 2019-2023 CIHR Team \* U D Q W 3 \$ 1 D W L R Q D O 5 H V H D U F K H a b o w i z , R U N R PI: K. Moore) (CAN\$4,300,000).
8. 2017-2018 Northwest Territories Cumulative Impact C O R Q L W R U L Q J S U R J U D P a t i o n , 0 3 S U R G X F W L Y L W \ D Q G S K H Q R O R J \ D E A N \$ 37,000 (Co-Investigator, PI: V W Ryan Danby)
9. 2015-2016 Ontario Centre of \_\_\_\_\_

- 22. 2010-2013 Canada Foundation for Innovation Leaders Opportunity Grant (VWDEOLVH) Queen's Geocomputation and Analysis Laboratory Public Health and Disease Modeling (PI) (CAN\$100,883)
- 23. 2010-2013 Ontario Ministry of Research DQG, QQR YDWLRQ (VWDEOLVKLQ) Geocomputation and Analysis Laboratory Public Health and Disease Modeling (PI) (CAN\$100,883)
- 24. 2010-2011 Southeastern Ontario Academic Medical Association HSC AFP innovation grant. external health care resources (Co-3, ZLWK 0 \*UHHQ DQG RWCAN\$97,000) W 4 X
- 25. 2008-2013 Geomatics for Informed Decision (GEOIDE), National Centre of Excellence. evaluating health outcomes of communicable diseases (Co-PI with Profs. J. Wu at York Univ. and M. Bernard at Laval Univ.) (CAN\$860,000 with my portion \$205,000)
- 26. 2009-2012 Public Health Agency of Canada PHAC (6SDWLDO DQG (QYLURQP HC

GPHY 249\*/GPHY344\*: Cartography and thematic mapping  
 GPHY 349\*: Geographic Information System  
 GPHY346\*/GISC 302\*: Environmental Modeling  
 GPHY345\*: Spatial Analysis  
 GPHY348\*/GISC 303\*: Application design and customization in GIS

PUBLICATIONS : Peer-reviewed journal papers: 92; Edited books: 3; Book Chapters: 21; Full paper in Conference Proceedings: 25; Technical reports: 8; Conference Presentations/posters: 90

REFEREED JOURNAL ARTICLES (Names highlighted are my HQPs and myself, Names in *Italic* are visiting researchers/collaborators in my lab)

1. S. E. Jozdani, D. Chen, W. Chen, S. G. Leblanc, J. Lovitt, L. He, R. H. Fraser, B. A. Johnson. 2021. Evaluating Image Normalization via GANs for Environmental Mapping: A Case Study of Lichen Mapping Using High Resolution Satellite Imagery. *Remote Sensing*. 13(24), 5035. <https://doi.org/10.3390/rs13245035>
2. X. Ouyang, D. Chen, S. Zhou, R. Zhang, J. Yang, G. Hu, Y. Duan and Q. Guo. 2021. A slightly temperature warming trend occurred over Lake Ontario from 2001 to 2018. *Remote Sensing*. 13(10), 1315. <https://doi.org/10.3390/rs13101315>
3. S. Hutasavi, D. Chen. 2021. Estimating District-level Electricity Consumption Using Remotely Sensed Data in Eastern Economic Corridor, Thailand. *Remote Sensing*. 13(22), 4654. [10.3390/rs13224654](https://doi.org/10.3390/rs13224654)
4. L. Wang, J. Yu, D. Chen, L. Yang. 2021. Relationships among COVID-19 prevention practices, risk perception and individual characteristics: A temporal analysis. *International Journal of Environmental Research and Public Health*. 18, 10901. DOI:10.3390/ijerph182010901
5. S. E. Jozdani, D. Chen, W. Chen, S. G. Leblanc, C. Prévost, J. Lovitt, L. He; B. A. Johnson. 2021. Leveraging Deep Neural Networks to Map Caribou Lichen in High Resolution Satellite Images based on a Small Scale, Noisy UAV-Derived Map. *Remote Sensing*, 13, 2658. DOI:10.3390/rs13142658
6. M. Burnett and D. Chen. 2021. The Impact of Seasonality and Land Cover Distribution on the Consistency of Relationship between Air Temperature and Land Surface Temperature Derived from Landsat 7 and MODIS at a Local Scale: A Case Study in Southern Ontario. *Remote Sensing*, 13, 672. DOI:10.3390/rs1310070672 (Editor's choice paper)
7. H. Yao and D. Chen. 2021. Comparison of Apportionment Methods for Assigning Trip Data to Rezoned Traffic Analysis Zones: A Case Study of Toronto, Canada. *The Canadian Geographer*. 65(3):321-332. DOI: 10.1111/cag.12675.
8. X. Wang, P. Du, D. Chen, S. Liu, E. Li, W. Zheng. 2020. Change detection based on low-level to high-level features integration



28. X. Ouyang D. Chen, Yonghui Lei 2018. A generalized evaluation scheme for comparing temperature







77. Liu, X., Gao, L., Zhang, B., and Chen, D. 2009. A maximum noise fraction transform with improved noise estimation for hyperspectral images. *Science in China Series F: Information Sciences* 52(9): 1578-1587.
78. Liu, W. and D. Chen. 2009. Spatial impact of organic matters from point sources on stream water quality. *Mining Science and Technology* 19(2): 256-261.
79. Chen, D. and H. Wei. 2009. The effect of spatial autocorrelation and class proportion on the accuracy measures from different sampling designs. *ISPRS Journal of Photogrammetry and Remote Sensing* 64(2): 140-150.
80. Zhang, B., J. Li, Q. Shen, and D. Chen. 2008. A bio-optical model based method of estimating total suspended matter of Lake Taihu from near infrared remote sensing reflectance. *Environmental Monitoring Assessment* 145: 339-347.
81. D. Chen. 2008. A standardized probability comparison approach for evaluating and combining pixel based classification procedures. *Photogrammetric Engineering & Remote Sensing*

(<http://www.intechopen.com/books/show/title/advanced-applications-in-geoscience>)

### BOOK CHAPTERS

1. Lei Wang, Chris. I. Ardern and Dongmei Chen. 2019. Mortality: A study of linking risk factors and building. E. Delmelle, Y. Lu. (ed.) Geospatial Technologies for Doi:10.1007/9783-030-195731\_3.
2. Hussain, M., and D. Chen. 2018. Building Level Character Vector Data by Using Direct and a Three Tier Postcode (Eds.): Computational Science and Its Applications 17. [https://doi.org/10.1007/978-3-319-951683\\_20](https://doi.org/10.1007/978-3-319-951683_20).
- 3.



9. Q. Miao, D. Chen, M Bouchard, J.J. Spinelli, I. Burstyn, K. J. Aronson. 2012. Associations between Socio-Economic Factors, Ethnicity, and Traffic Exposure in Montreal, Canada. In proceeding of Conference on Environmental Pollution and Public Health (CEPPH 2012) Shanghai, China, August 10-12, 2012. Published by Scientific Research Publishing. ISBN: 9781-61896010-8.
10. Hussain, M., Barr, R., Chen, D. 2012. Building based urban land use classification from vector databases in Manchester, UK. In the Geoinformatics 2012 Proceedings, June 7, 2012, Hong Kong, China. [10.1109/Geoinformatics.2012.6270327](https://doi.org/10.1109/Geoinformatics.2012.6270327)
11. D. Chen and M. Hussain. 2011. An object based data mining framework for change detection in urban areas from very high resolution images. In proceedings of International Symposium on Remote Sensing and GIS method for Change Detection and Spatiotemporal Modeling

24. Chen, D., and R. Church. Reducing data aggregation errors in location modeling: an analysis of the p median problem. Paper presented at the 45<sup>th</sup> North American Meetings of Regional Science Association International, Santa Fe, New Mexico, November 14-14, 1998.
25. Chen, D. Multiresolution Models on Image Analysis and Classification. Paper presented at the Annual Assembly and Summer Retreat of University Consortium for Geographic Information Science, Harbor, Maine, June 15-21, 1997.

#### TECHNICAL REPORTS AND OTHER DOCUMENTS

1. D. Chen. 2019. Extracting and monitoring buildings from multispectral remotely sensed images with object-based image analysis: an experiment in Kingston, Jamaica. Final report submitted to Statistic Canada. 43p.
2. Lewis, D. J. Veseley, X. Qiu, J. Byrne, and D. Chen. 2012. Potential impact of climate change on water availability and land use/land cover in SSRP area of Southern Alberta: Scoping study and recommendation for integrated model development. Final report submitted to Alberta Ministry of Environment. 90p.
3. L. Wang, S. Stalker, C. Ardern, S. Hoetmer, W. Kou, P. Simmons, S. Cholewa-Dabala, and D. Chen. 2012. Development of a Spatial Framework to Enhance Cardiovascular Disease Surveillance. Final report submitted to Public Health Agency of Canada. Project 6271-15-2008/3970757. 149p.
4. Tian, J., D. Chen, and D. McGuinness. 2006. Spatial-temporal cluster detection approaches in the syndromic surveillance system. 5 H S R U W H G W R 4 X H H Q ¶ V 8 Q L Y H U V L W \ ( P H Team, KFL&A Public Health Unit.

- x 2009. School of Geography & Earth Science, McMaster University
- x 2008 4 X H H Q ¶ V & R P S X W H U 6 F L H Q F H D Q G ( Q J L Q H H U L Q J & R O O F
- x 2008. Graduate school of Chinese Academy of Science
- x 2007. Disease Centre, York University
- x

PH.D

- x Jie Tian (Ph.D. completed in 2009) hired by University of Illinois at Urbana-Champaign as a visiting assistant professor, now tenured at Clark University
- x Wenbao Liu (Ph.D, completed in 2012) (Faculty member at Shandong Technology University)
- x Grace Miao (Ph.D. completed in 2013, cø V X S H U Y L V H G Z L W K . 8! A80 ä U Y • € U Y

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- x 0LWFKHOO %RQQH\ 0 6 JHRJUDSK\ 4XHHKQDG V GH OHJDW
- x Jian Yang (Ph.D) (Geography, Univ. Toronto, 2017) External Appraiser
- x (PPD :HEE 0 6 JHRJUDSK\ 4XHHKQDG V +HDG V GH OHJDW
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- x Nanor Momejian (Ph.D)JHRJUDSK\ 4XHHKQDG V Chair
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- x One of three organizers of the PHAC/GEOIDE/MITACS joined workshop on mathematical modeling and geosimulation for disease spread, Feb 18, 2009. Ottawa.
- x Organizer and chair of the PHAC/GEOIDE/MITACS workshop on spatial and temporal dynamics of zoonotic diseases in Aug. 2010, Toronto.
- x One of four organizers of the workshop on statistical methods for geographic and spatial data in the management of natural resources for the National Institute on Complex Data Structures in March 2010 Montreal
- Tenure and renewal reviewer
- x University of Toronto, Toronto, Canada
- x