

March 11, 2016

Prof. Dr. Christian Heipke Secretary General International Society of Photogrammetry and Remote Sensing Leibniz University Hannover Institute of Photogrammetry and GeoInformation Nienburger Str. 1 D-30167 Hannover Germany

By email: <u>heipke@ipi.uni-hannover.de</u>

Re: Canadian Candidacy for the Presidency of Commission I, ISPRS

Dear Dr. Heipke,

The Canadian Institute of Geomatics (CIG) is pleased to submit the attached proposal for Candidacy of Commission I of the ISPRS, for the period 2016-2020. I believe the CIG is able to provide a strong proposal team of internationally recognized leaders in the field of Sensor Systems. This team will be supported with financial, administrative, planning, and communication resources by our partners in academia, industry, and professional organizations. In this regard, I would like to draw your attention to the attached letter written by Dr. Jean Andrey, Dean of the Faculty of Environment, University of Waterloo, outlining the exceptional qualifications of Dr. Jonathan Li, our proposed candidate for Commission I President. Dr. Julian Smit at the University of Cape Town, South Africa is proposed for Vice President of Commission I.

The CIG and ISPRS have a long and successful history of organizing rewarding collaborative events, workshops and conferences. In the previous five terms, Canada had four Commission Presidents, namely:

- Dr. Songnian Li, Commission II President, 2012-2016
- Dr. Naser El-Shiemy, Commission I President, 2008-2012
- Dr. Costas Armenakis, Commission IV President, 2000-2004
- Dr. Mosaad Allam, Commission II President, 1992-1996

In addition, a number of Canadians have served on Commission I as WG/ICWG officers in 2012 – 2016 (four), 2008 – 2012 (five), and 2004 – 2008 (three). Furthermore, the Canadian industry in the technical area of sensors, photogrammetry, and remote sensing is very strong; over 2000 companies are major players in many of ISPRS activities (e.g., Applanix Inc., PCI Geomatics Co., NovAtel Inc., Teledyne Optech Inc., MacDonald, Dettwiler and Associates Ltd., to name a few). Additionally, Canada has hosted some of the top geomatics programs including the field of photogrammetry and remote sensing, such as geomatics engineering programs at the University of Calgary, University of New Brunswick, York University and geomatics science programs at the University of Waterloo and Université Laval, to name a

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few. It can be ensured that there will be active participation and support of the Canadian industry and universities in the Commission I events.

Like the Faculty of Environment of the University of Waterloo, the CIG will support the presidency during its full tenure with our administrative resources. The CIG being the ordinary member of Canada, will be happy to host of the Commission I Symposium in 2018 and will provide necessary assistance and support.

Sincerely,

Alex Giannelia, B.A.A.

CIG President



March 1, 2016

Mr. Alex Giannelia, B.A.A. President, Canadian Institute of Geomatics 900 Dynes Road, Suite 100 D Ottawa, Ontario K2C 3L6 Canada Telephone (613) 224-9851 Facsimile (613) 224-9577 ag@airsensing.com, admincig@magma.ca

Dear Mr. Giannelia,

Letter of Support for the Nomination of Dr. Jonathan Li for the Presidency of the ISPRS Commission I – Sensor Systems (2016-2020)

It is my pleasure to support the nomination of Dr. Jonathan Li for the Presidency of ISPRS Commission I – Sensor Systems for the period 2016-2020. Dr. Li, Professor of Geomatics in the Department of Geography and Environmental Management, Faculty of Environment, University of Waterloo, has clearly demonstrated an outstanding capability to conduct a world class research program in mobile laser scanning systems and he is a recognized authority in this area. His research work on the development and application of the light detection and ranging (LiDAR) onboard airborne and vehicle-borne platforms, and the synthetic aperture radar (SAR) onboard airborne and satellite-borne platforms is having a significant impact in the field of photogrammetry and remote sensing. Since joining the University of Waterloo in 2007, Dr. Li has played a leadership role in putting our Geomatics Program in the Department of Geography and Environmental Management as a leading centre of excellence in photogrammetry and remote sensing in Canada and worldwide. Dr. Li is a most effective professor in our Faculty, and I firmly believe that he is ideally suited to lead ISPRS Commission I over the next four years.

Dr. Li has been nationally and internationally recognized for his contributions to his field. He has coauthored more than 300 research publications, over 130 of which were published in the top-tier refereed journals in the field of photogrammetry and remote sensing, such as ISPRS-JPRS, RSE, IEEE-TGRS, IEEE-JSTARS, IEEE-TITS, IEEE-GRSL, IJRS, PERS and JAG. In addition, he has coedited seven books, one of which entitled "Advances in Mobile Mapping Technology" and published in 2007 has been cited 67 times. Dr. Li has occupied senior positions in several national and international learned societies and associations, as a result of his credibility and respect among his peers worldwide. He is currently Associate Editor of IEEE Transactions on Intelligent Transportation Systems (IEEE-TITS), IEEE Journal of Selected Topics in Earth Observations and Remote Sensing (IEEE-JSTARS), Geoenvironmental Disasters, Sensors, and Geomatica. He has served as a member of the CIG National Committee for ISPRS and a council member of the Ontario Association of Remote Sensing since 2001.

Dr. Li is involved in several international societies including being Chair of the Inter-Commission Working Group on Mobile Scanning and Imaging Systems within the International Society for Photogrammetry and Remote Sensing (ISPRS) (2008-2012, 2012-2016), Chair of the International Cartographic Association (ICA) Commission on Sensor-drive Mapping (2015-2019, Vice Chair 2011-2015), Chair of the International Federation of Surveyors (FIG) Working Group on Working Group 4.2 on Maritime and Marine Spatial Information Management (2011-2015, 2015-2019). His professional involvement also includes being convener and chair of six international events, chair and co-chair of the program committee for over 10 international conferences, and chair of over 30 sessions at international events. His efforts in co-organizing the Mobile Mapping Technology (MMT) symposia series since 2004, organizing the Earth Observation of Global Changes (EOGC) conferences series since 2009, and organizing the Computer Vision in Remote Sensing (CVRS) conferences series since 2012 are clear indications of his dedication to serving the ISPRS, ICA, IEEE, and FIG. Overall, Dr. Li's contributions to the scientific communities are exceptional. He has inspired his colleagues with his dedication and standards of excellence in all that he does.

Our Faculty of Environment recognizes the valuable work that the ISPRS is doing for the advancement of knowledge, research, development and education in photogrammetry, remote sensing and spatial information sciences to the wellbeing of humanity and sustainability of the environment. These are also key areas for our Faculty and Dr. Li is an excellent candidate for realizing these shared visions. I give my highest support for his nomination for the Presidency of ISPRS Commission I, and you can be assured that we will support Dr. Li by accommodating his time spent on the various activities that he will be undertaking during a term as President of ISPRS Commission I (2016 – 2020).

Sincerely,

Jean Andrey, PhD Professor of Geography Dean, Faculty of Environment

cc: Prof. Christian Heipke, ISPRS Secretary General



February 29, 2016

Dr. Christian Heipke Secretary General International Society of Photogrammetry and Remote Sensing Leibniz University Hannover Institute of Photogrammetry and GeoInformation Nienburger Str. 1 D-30167 Hannover GERMANY

Dear Dr. Heipke,

Re: Canadian Candidacy for the Presidency of Commission I, ISPRS

The South African Society for Photogrammetry and Remote Sensing (SASPRS) is pleased to support the proposal for Candidacy of The Canadian Institute of Geomatics (CIG) for Commission I of the ISPRS, for the period 2016-2020.

Dr Jonathan Li (University of Waterloo, Canada) is proposed as the Commission I President, with support from Dr Julian Smit (University of Cape Town, South Africa) as the Vice-President.

The 'partnership' between the CIG and SASPRS will enable the Commission I activities to have a broad reach in both the 'developed' and 'developing' world, which I believe is crucial to ensuring the ISPRS objectives of stimulating/promoting national and regional photogrammetry and remote sensing association, and promoting cooperation and coordination with related scientific organisations.

Although the SASPRS represents a small cohort of photogrammetry and remote sensing academics and practitioners, it serves as a nodal point for interaction with a broader geomatics community both locally and within the Southern African region. The proposed 'partnership', with the CIG as the lead organisation in Commission I activities, will allow for a far greater range of activities to be possible for the Commission. The larger and better resourced CIG, through the proposed Commission Presidency of Dr Jonathan Li has a significant network throughout the 'developed' world, whilst the SASPRS will facilitate interaction within the African context.

It is through these collaborative arrangements that knowledge and skills transfer, which will foster greater engagement of the 'developing' world in ISPRS activities, will be made possible.

The proposal for Candidacy of The Canadian Institute of Geomatics (CIG) for Commission I of the ISPRS, for the period 2016-2020, has the full support of the South African Society for Photogrammetry and Remote Sensing.

Sincerely,

Dunco Patricia Duncan

SASPRS Secretary

TUS

Julian Smit SASPRS President

Canadian Candidacy for the Presidency of Commission I – Sensor Systems of The International Society of Photogrammetry and Remote Sensing (ISPRS)

For The Period of 2016-2020

Proposal By

Canadian Institute of Geomatics

900 Dynes Road

Suite 100D, Ottawa, ON, K2C 3L6

Telephone (613) 224-9851

Facsimile (613) 224-9577



Ordinary Member and Official Host

March 1, 2016

A Proposal for Canadian Candidacy for the Presidency of Commission I

of The International Society of Photogrammetry and Remote Sensing (ISPRS)

for the Period of 2016-2020

The Faculty of Environment, University of Waterloo recommends Dr. Jonathan Li for the presidency of Commission I of the International Society of Photogrammetry and Remote Sensing. The University of Waterloo hereby declares that it will support Dr. Jonathan Li and accommodate his time spent on the different activities that he will be undertaking during the period of July 2016 to July 2020.

1. Candidacy Recommended by:

The Candidacy of Dr. Jonathan Li for the presidency of the ISPRS Commission I for the period of 2016-2020 is proposed by Mr. Alex Giannelia, President of the Canadian Institute of Geomatics (CIG).

2. Candidates Presented for the ISPRS Commission I Presidency are:

President: Dr. Jonathan Li, Professor of Geomatics, Department of Geography and Environmental Management, University of Waterloo, Waterloo, Ontario, Canada. Resume is attached in Annex I.

Vice-President: Dr. **Julian Smit**, Associate Professor of Photogrammetry and Remote Sensing, School of Architecture, Planning, and Geomatics, University of Cape Town, Rondebosch, Western Cape, South Africa. Resume is attached in Annex II.

3. Financial Support

The financial support and management will be provided by the University of Waterloo, Ontario, Canada.

a) Commitment for ISPRS Activities

- The Department of Geography and Environmental Management, University of Waterloo assures its support and accommodation to Dr. Jonathan Li's time to undertake all the necessary activities of the ISPRS Commission I as a President, mainly for organization and management of the Commission as well as for travel to attend the Commission I symposium, ISPRS council meetings, ISPRS Congress, ISPRS Geospatial Weeks and other ISPRS-sponsored conferences, workshops, and meetings specially those related to the working groups of Commission I.
- The School of Architecture, Planning and Geomatics, University of Cape Town assures its support and accommodation to Dr. Julian Smit's time to undertake all the necessary activities of the ISPRS Commission I as a Vice-President, mainly for organization and management of the Commission as well as for travel to attend the Commission I symposium, ISPRS Congress, ISPRS Geospatial Weeks and ISPRS-sponsored conferences, workshops, and meetings specially those related to the working groups of Commission I.

• The Canadian Institute of Geomatics will provide logistical, administrative, organizational support to Dr. Jonathan Li during the full tenure of the Commission I presidency and will be the official host of the Commission I Symposium in 2018.

b) Organization of Commission I Symposium

• Venue: It is proposed to hold the Commission I Symposium in Niagara Falls during the last week of June 2018. The proposed venue is the Sheraton On The Falls Hotel, 5875 Falls Avenue, Niagara Falls, Ontario L2G 3K7, Canada. The hotel has the required conference facilities. In addition, as a famous tourist destination, the City of Niagara Falls has many hotels ranging from 2-starts to 5 starts and various restaurants nearby the Sheraton On The Falls Hotel (within 3 km distance). The Sheraton on the Falls Hotel Conference Centre is the largest Conference facility in Niagara Falls. Offering the majestic Great Room, and over 35 additional meeting rooms, some featuring a spectacular view of Niagara Falls. The Sheraton Conference Center can host events for 13 to 3000 guests comfortably. Other surrounding hotels include the Four Points by Sheraton Niagara Falls (4-starts), Hilton Hotel and Suites Niagara Falls (4-starts), Niagara Falls Marriott Fallsview Hotel & Spa (4-stars), Best Western Fallsview (3-stars), Clifton Victoria Inn at the Falls (3-stars), Comfort Inn (3-stars), Fairway Inn (2-starts).



- **Co-organizers**: The Canadian Institute of Geomatics and the University of Waterloo are going to co-organize the Commission I Symposium. All financial gain or loss from this event will be shared between the organizations proportionally. It is possible to bring other sister societies as co-organizers later, such as the Canadian Remote Sensing Society (CRSS), the Canadian Cartographic Association (CCA), Ontario Association of Remote Sensing (OARS), and Association of Ontario Land Surveyors (AOLS) etc.
- Budget: The estimated budget for the Symposium is expected to be CAN \$90,000

DEPENSES	CAN \$
Secretariat	5 000
Publication, Editing, and Program	20 000
Audio/Video	20 000
Gala Dinner	30 000
Technical Visits	10 000
Paying for ISPRS Council attendee Living Expenses	5 000
ISPRS	9000

Total	90 000
Attendees	
150 participants (500 CAD)	75000
30 participants at reduced rate (students, early registration,	7500
etc) (250 CAD)	
Exhibition	7500
Total	90 000

- Registration Cost is 600 CAD for on-site registration (or for registering less than 3 months in advance)
- A pre-symposium tutorial will also be organized for one full day for about 50 100 participants.
- Please note that this is considered the minimum budget. CIG's past experience with ISPRS symposia like this indicate that an attendance of 300-500 participants is normal in Canada when other associations are encouraged to participate

c) Commitment of the partners.

- The Dean of Environment, University of Waterloo has approved to financially support Dr. Jonathan Li for the period of 2016 to 2020. Attached is the letter confirming that.
- The President of South African Society for Photogrammetry and Remote Sensing has provided a letter of support (attached) to support Dr. Jonathan Li for the Commission I President candidacy and Dr. Julian Smit for the Commission I Vice President candidacy for the period of 2016 to 2020.

4. Proposal for The Work Plan

The work plan as well as the structure of the working groups will be finalized and will have to be approved by the ISPRS Council on the first meeting following the 2016 Prague Congress and will take into account the resolution that will be voted by members of the ISPRS.

The proposed Commission I program confirms maintaining successful activities of the working groups. The working groups officers (Chairs, Co-Chairs, Scientific Secretaries) will be furnished shortly after the 2016 Prague Congress. It is suggested to have up to 8 working groups (WGs). The WGs will be established based on the new Terms of Reference and resolutions, which will be adopted in the 2016 Prague Congress.

• Title of Commission I

Sensor Systems

• Proposed Terms of Reference

This work plan will cover the development, use and integration of multiple sensor systems and imaging and ranging technologies for mapping and measurement and the associated standardization applications. Many of the issues that will be addressed are global in nature and Commission I, working with like-minded Sister Associations, will be well placed to deal with them. Specific activities aimed at developing countries include examination of low-cost imaging and ranging technologies and contribution to appropriate continuing professional development programs will be emphasized. The following TOR are proposed:

• Design and realization of aerial and spaceborne missions for earth observation

- Design, construction, characterization, and installation of imaging and nonimaging sensors (including Optical, multispectral, hyperspectral, SAR, InSAR, LiDAR, etc.)
- Design, construction, characterization, installation, testing, calibration and evaluation of imaging and ranging sensors
- Standardization of definitions and measurements of parameters of sensor systems
- Integration of imaging and non-imaging sensors with other relevant systems
- Integrated platform guidance, navigation, positioning and orientation
- Design, testing and evaluation of data reception and pre-processing techniques
- Systems and media for recording sensor data, auxiliary data (time, position, attitude, etc.)
- Geometric and radiometric properties of remotely sensed data, quality standards, and factors (environmental and others) affecting data quality

• Mission Statement

- Focus on modern technologies and technical developments and assist technology developers and users, through guidelines and recommendations, to choose and utilize those methods, technologies and instruments that are most appropriate to different applications.
- Follow technical developments through collaboration with other ISPRS Commissions and other international sister organizations, participation in appropriate meetings, and the preparation of appropriate publications.
- Support research and development and stimulate new ideas in the fields of expertise represented within the commission.
- Collaborate with manufacturers on the improvement of instrumentation and associated software.
- Present and promote the work of the commission and its working groups on an on-going basis at ISPRS Meetings and other relevant technical meetings.

• Proposed Events (to be completed after the 2016 Prague Congress)

The Events in the Calendar below have been classified according to the type of Commission I involvement as follows:

- **Commission I Symposium:** This will be the main event for Commission I and will include all the WGs and ICWGs. It will take place in the last week of June 2018 in the City of Niagara Falls, Ontario, Canada. The theme will be aligned along the Commission TOR and mission. Further details (date, place, etc) will be furnished shortly following the ISPRS congress and the final date approved by the council to avoid overlap between different commissions symposia. The selection of the presentation there will be a scientific committee consisting of the Commission officers, WG officers.
- **Commission I Events:** These are directly associated with Commission I WGs meetings.
- Inter-Commission Events: These further Inter-Commission cooperation and has Commission I involvement, such as Geospatial Week 2017 in Wuhan and Geospatial Week in 2019 (TBD); UAV-g 2017 in Bonn, Germany and UAV-g 2019 (TBD).

• Liaison Events: These further Commission I goals for Liaison and will be attended by the Commission I WGs officers, such as the 10th and 11th International Symposium on Mobile Mapping Technology, that is MMT 2017 in Cairo, Egypt and MMT 2019 (TBD) to be co-organised with the ICA, FIG, ION, and IAG, respectively.

• Proposed WGs and the geographic distribution of WG officers

WG I/1: Mobile Multi-Sensor Systems for Mapping Applications

- Naser El-Shiemy, Chair, Canada
- Kai-Wei Chiang, Co-Chair, Taiwan,
- Sherin Mostafa, Co-Chair, Egypt
- Xiaoji Niu, Secretary, China

WG I/2: Unmanned Vehicle Systems for Mapping Applications

- Görres Grenzdörffer, Chair, Germany
- Costas Armenakis, Co-Chair, Canada
- Babak Ameri, Co-Chair, Canada
- Francesco Nex, Secretary, The Netherlands

WG I/3: Multi-Platform Multi-Sensor System Calibration

- Cheng Wang, Chair, China
- Ayman Habib, Co-Chair, USA
- Antonio Tommaselli, Co-Chair, Brazil
- Chenglu Wen, Secretary, China

WG I/4: Airborne LiDAR and InSAR Sensor Systems

- Norbert Haala, Chair, Germany
- Charles Toth, Co-Chair, USA,
- Franz Meyer, Co-Chair, USA
- Dorota Iwaszczuk, Secretary, Germany

WG I/5: Standardization of Platform Interfaces

- Huadong Guo, Chair, China
- Randy Albertson, Co-Chair, USA
- Philip Brown, Co-Chair, UK
- Chunming Han, Secretary, China

WG I/6: Spaceborne Optical and SAR Sensor Systems

- Xinming Tang, Chair, China
- Boris Jutzi, Co-Chair, Germany
- Ralf Reulke, Co-Chair, Germany
- Mi Wang, Secretary, China

WG I/7: Airborne and Spaceborne Sensors Modeling

- Peter Reinartz, Germany
- Daniela Poli, Co-Chair, Austria

- Karsten Jacobsen, Co-Chair, Germany
- Mehdi Ravanbakhsh, Secretary, Australia

WG I/8: Indoor Mapping Sensor Systems

- Kourosh Khoshelham, Chair, Australia
- Daniel Santos, Co-Chair, Brazil
- Ingo Neumann, Co-Chair, Germany
- Lucía Vilariño, Secretary, Spain

Annexe 1 : CURRICULUM VITAE - Jonathan Li

Name:	Jonathan Li
Present Position:	Professor
Address:	Department of Geography and Environmental Management,
	Faculty of Environment, University of Waterloo
	200 University Avenue West
	Waterloo, Ontario N2L 3G1, Canada.
Work Phone:	+1 519 888 4567, ext. 34504
Cell Phone:	+1 647 968 6898
Fax :	+1 519 746 6580
E-mail:	junli@uwaterloo.ca
Web Page:	https://uwaterloo.ca/mobile-sensing/



EDUCATION:

- Ph.D. Geomatics Engineering (Specialty: Photogrammetry and Remote Sensing), Department of Geomatics, Faculty of Engineering and the Build Environment, University of Cape Town, South Africa, 2000
- B.Eng. Geodetic Engineering (Specialty: Satellite Geodesy), Department of Geodesy, Wuhan Technical University of Surveying and Mapping (Wuhan University, today), China, 1982.

ACADEMIC AND OTHER APPOINTMENTS

- Professor, tenured, Department of Geography and Environmental Management, University of Waterloo, 07/2010-present
- Fujian Distinguished Chair Professor and Dean, School of Information Science and Engineering, Xiamen University, China, 08/2011-08/2014
- University Senate, elected, University of Waterloo, Canada, 05/2011-04/2014
- Associate Professor, tenured, Department of Geography and Environmental Management, University of Waterloo, Canada, 01/2007-06/2010
- Associate Professor, tenured, Department of Civil Engineering, Ryerson University, Canada, 07/2005-12/2006.
- Assistant Professor, Department of Civil Engineering, Ryerson University, Canada, 08/2001-06/2005.
- Assistant Professor, Department of Geography, University of Regina, Canada, 08/2000-07/2001
- Project Manager, Emoyeni Training Centre/Emoyeni Survey Company (Pty) Ltd, South Africa, 01/1998-07/2000
- Research Associate, Department of Geomatics, University of Cape Town, South Africa, 09/1995/12/1997
- Visiting Scholar, Department of Civil and Geomatics Engineering, University FAF Munich, Germany, 11/1992-12/1993
- Research Engineer, Xi'an Research Institute of Surveying and Mapping, China, 07/1982-10/1992, 01/1994-09/1995

AWARDS, DISTINCTIONS AND FELLOWSHIPS

- Ford Bartlett Award, American Society for Photogrammetry and Remote Sensing, USA, 2015
- Best PhD Thesis Award of Fujian Province, Fujian Ministry of Education (Y. Yu, supervised), China, 2015
- Best Paper Award in Mobile Mapping Technology, MMT 2013, May 1–3, 2013, Tainan, Taiwan, 2013
- Ford Bartlett Award, American Society for Photogrammetry and Remote Sensing, USA, 2013
- Fujian Distinguished Chair Professorships, Fujian Provincial Government, China, 2012
- Talbert Abrams Award (First Honorable Mention), American Society for Photogrammetry and Remote Sensing, USA, 2011
- Ford Bartlett Award, American Society for Photogrammetry and Remote Sensing, USA, 2011
- Best Master Thesis Award, Canadian Remote Sensing Society (Y. Shu, supervised), Canada, 2010
- EOGC Award for Best Paper (2nd place), The 2nd International Conference on Earth Observation of Global Changes, China, 2009
- ESRI Award for Best Scientific Paper in Geographic Information Systems, American Society for Photogrammetry and Remote Sensing, USA, 2008
- Best Paper Award of 2007 CIG Annual Conference, Canadian Institute of Geomatics, Canada, 2007
- MDA Award for Best Paper in Orthophotography, Photogrammetry and Surveying, published in GEOMATICA, Canadian Institute of Geomatics, Canada, 2006
- Faculty Merit Award, Ryerson University, Canada, 2005
- Faculty Merit Award, Ryerson University, Canada, 2004
- New Opportunities Fund Award of Canada Foundation for Innovation (CFI), Canada, 2003

- Faculty Merit Award, Ryerson University, Canada, 2002
- Ministry Science and Technology Progress Award (3rd Place), China, 1995
- Best Translated Book Award (2nd place), The Shaanxi Translator's Association, China, 1994
- Ministry Science and Technology Progress Award (3rd Place), China, 1988

PROFESSIONAL SERVICES RELATED TO ISPRS

- Chair, ISRRS ICWG I/Va on Mobile Scanning and Imaging, 2012-2016; Chair, ISPRS ICWG V/I on Landbased Mobile Mapping Systems, 2008-2012; Co-Chair, ISPRS WG IV/8 on Spatial Data Integration for Emergency Services (2004-2008);
- CIG Canada's National Committee for ISPRS, Canadian Institute of Geomatics, 2002-present
- Advisor, Canadian Delegation to ISPRS 2012 Melbourne Congress, 2012
- Advisor, Canadian Delegation to ISPRS 2008 Beijing Congress, 2008
- Canada's National Correspondent for ISPRS Commission IV, 2004-2008
- Canada's National Correspondent for ISPRS Commission I, 2002-2004
- Co-editor of two ISPRS Book Series Volumes: Zlatanova S, Li J (eds), 2008. Geospatial Information Technology for Emergency Response, ISPRS Book Series, Vol. 6, Taylor & Francis, London; Tao CV, Li J (eds), 2007. Advances in Mobile Mapping Technology, ISPRS Book Series, Vol. 4, London: Taylor & Francis
- Co-Chair, Program Committee, 9th International Symposium on Mobile Mapping Technology (MMT 2015), Sydney, Australia, 2015
- Conference Co-Chair, Joint Event of the 5th International Conference on Earth Observation for Global Change (EOGC 2015), Al-Ain, UAE, 2015.
- General Chair, 2nd International Symposium on Computer Vision in Remote Sensing, Xiamen, China, 2015
- LoC Chair and distinguished lecturer, 3rd International Summer School on Mobile Mapping Technology, Xiamen, China, 2015
- Session Chair and Program Committee, ISPRS TC I Symposium, Denver, USA, 2014
- Session Chair and International Reviewing Committee, ISPRS TC I Symposium, Riva del Garda, Italy
- Conference Chair, 5th International Conference on Geoinformation Technologies for Natural Disaster Management, Mississauga, Ontario, 2013.
- Chair, Scientific Committee, 4th International Conference on Earth Observation of Global Changes (EOGC2013), Toronto, Ontario, Canada, 2013
- Co-Chair, 8th International Symposium on Mobile Mapping Technology (MMT2013), Tainan, Taiwan, 2013
- Conference Chair, International Conference on Computer Vision in Remote Sensing (CVRS2012), Xiamen, China, 2012
- Session Chair, ISPRS 2012 Melbourne Congress, 2012
- Scientific Committee, 7th International Symposium on Mobile Mapping Technology (MMT'11) Cracow, Poland, 2011
- Chair, Scientific Committee, ICA/ISPRS/FIG/IAG/SPIE Symposium on Lidar and Radar Mapping Technologies, Nanjing, China, 2011
- Co-Chair, Scientific Committee, 3rd International Conference on Earth Observations for Global Changes (EOGC2011), Munich, Germany, 2011
- LoC Co-Chair, International Workshop on Multi-platform/Multi-sensor Remote Sensing & Mapping (cosponsored with IEEE GRSS), Xiamen, China, 2010
- General Co-Chair, Chair, Scientific Committee, Invited Talk, International Workshop on Terrestrial Lidar Mapping: From Static to Mobile (LIDAR 2010), Zhengzhou, China, 2010
- Session Chair and Scientific Committee, Canadian Geomatics Conference 2010 and ISPRS Technical Commission I Mid-Term Symposium, Calgary, Alberta, Canada, 2010
- Session Chair and Scientific Committee, 6th International Symposium on Mobile Mapping Technology (MMT'09), Presidente Prudente, Brazil, 2009
- Chair, Scientific Committee, 2ndInternational Conference on Earth Observation for Global Changes (EOGC2009), Chengdu, China, 2009
- Session Chair, ISPRS 2008 Beijing Congress, Beijing, China, 2008
- Chair, Scientific Committee, 3rd International China Workshop on Information Systems for Crisis Response & Management (ISCRAM-CHINA) joint 4th International Symposium on Geo-Information for Disaster Management (Gi4DM2008), Harbin, China, 2008
- Conference Co-Chair, Joint CIG/ISPRS Conference and Gi4DM 2007, Toronto, Ontario, Canada, 2007
- Session Chair, ISPRS 2004 Istanbul Congress, Istanbul, Turkey, 2004
- Conference Secretary, Panel Member, Panel/Technical Session Chairs, 4th International Symposium on Mobile Mapping Technology, Kunming, China, 2004

PROFESSIONAL SERVICES NOT RELATED TO ISPRS

- Chair, ICA Commission on Sensor-driven Mapping, 2015-2016; Vice Chair, ICA Commission on Mapping from Remote Sensor Imagery, 2011-2015; Vice Chair, ICA Commission on Mapping from Satellite Imagery, 2008-2011
- International Editorial Board, International Journal of Cartography (ICA official journal), 2015-present

- Chair, FIG Working Group 4.2 on Maritime and Marine Spatial Information Management, 2015-2018; Vice Chair, FIG Commission 4 on Hydrography, 2011-2014; Chair, FIG Working Group 4.4 on Maritime and Marine Spatial Information Management, 2011-2014
- IEEE Senior Member, IEEE Geoscience and Remote Sensing Society (GRSS), 2011-present
- Associate Editor, IEEE Transactions on Intelligent Systems, 2015-present
- Associate Editor, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015present
- Associate Editor, Geoenvironmental Disasters, Springer, 2014-present
- International Editorial Board (in Section of Remote Sensor), Sensors, 2007-present
- Associate Editor, Geomatics, CIG official journal, 2001-present
- Canada's National Delegate to FIG Commission 4, 2014- present
- Canadian Representative to ICA Commission on Mapping from Satellite Imagery, 2008-2011; Commission on Mapping from Remote Sensor Imagery, 2011-2015; Commission on Sensor-driven Mapping, 2015-2019
- General Chair, 2015 IEEE International Workshop on Multimedia Signal Processing, Xiamen, China, 2015
- Session Chair, IGARSS 2015, Milan, Italy, 2015
- Session Chair and International Scientific Committee, FIG Working Week 2015, Sofia, Bulgaria, 2015
- General Chair, 10th International Conference on Natural Computation (ICNC 2014), Xiamen, China
- General Chair,11th International Conference on Fuzzy Systems and Knowledge Discovery (FSKD 2014), Xiamen, China, 2014
- Session Chair, IGARSS 2014, Québec City, Québec, Canada, 2014
- LoC Chair, 6th ACM International Conference on Internet Multimedia Computing and Service (ICIMCS), Xiamen, China, 2014
- Session Chair and International Scientific Committee, 26th ICC, Dresden, Germany, 2013
- Chair, Scientific Committee, International Symposium on Geomatics for Integrated Water Resources Management (GIWRM2012), Lanzhou. Gansu, China, 2012
- Session Chair and ICA International Scientific Committee, 25th International Cartographic Conference (ICC 2011), Paris, France, 2011
- Session Chair, 2009 ASPRS Annual Conference, Baltimore, Maryland, USA, 2009
- Chair, Program Committee, 2005 ISEIS International Conference on Environmental Informatics, Xiamen, China, 2005
- LoC Chair, 13th International Conference on Geoinformatics, Toronto, Ontario, Canada, 2005
- Co-Chair, Program Committee, 1st International Symposium on Geoinformation for Disaster Management (Gi4DM), Delft, The Netherlands, 2005
- Co-Chair, Organizing Committee, 2002 ISEIS International Conference on Environmental Informatics, Beijing, China, 2002

PUBLICATIONS AND RESERACH

Dr. Jonathan Li is currently a Full Professor and Head of the Mobile Sensing and Geodata Science Lab, <u>https://uwaterloo.ca/mobile-sensing/</u>, at the Department of Geography and Environmental Management, Founding Member of the Interdisciplinary Centre on Climate Change (IC3), Member of the Water Institute, University of Waterloo, Canada. His research interests lie mainly in the areas of mobile laser scanning of urban environments and SAR remote sensing of coastal and marine environments. As a NSERC (Natural Sciences and Engineering Research Council of Canada) rated researcher, he has been the Principal Investigator (PI) and Co-PI of over 30 research projects supported by NSERC, CFI, Networks of Centres of Excellence of Canada, federal government agencies of Canada and provincial government agencies of Ontario, NSFC, and industrial sectors both in Canada and international. Dr. Li has co-edited 7 books published by Springer and Taylor & Francis since 2007. He has co-authored over 300 papers published in refereed journals and conference proceedings since 1995, more than 130 of which were published in top-tier journals in the field of photogrammetry and remote sensing, including ISPRS-JPRS, RSE, IEEE-TGRS, IEEE-JSTARS, IEEE-TITS, IEEE-GRSL, IJRS, PERS, JAG, etc. In the Google Scholar Citations (updated on 2 March 2016), his work in recent five years has received a total of 1344 citations, among which hi-index is 20 and i10-index is 40.

Dr. Li has been involved in organization and program committees of numerous international conferences, over a dozen of which were ISPRS-related events, in particular, biannual symposia of Mobile Mapping Technology (MMT) series (since 2003), Geoinformation for Disaster Management (Gi4DM) series (since 2005), Earth Observation of Global Change (EOGC) series (since 2009), Computer Vision in Remote Sensing (CVRS) series (since 2011). He is a regular reviewer for more than two dozens of prestigious international journals and serves on the review panel of the NSERC, Canada Foundation for Innovation (CFI), Canadian International Development Agency (CIDA) and International Scientific and Technological Partnerships (ISTP) Canada as well as the funding agencies of Belgium, China, Finland, Germany, Georgia, Hong Kong and USA. His research on mobile sensing systems has been recognized internationally. He has been invited frequently to give workshops and seminars at major conferences, government agencies, academia and industry.

CURRICULUM VITAE – Julian Smit

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EDUCATION:

- **Ph.D.** Geomatics Engineering, University of Cape Town, 1997
- **B.Sc.** Survey, University of Cape Town, 1993

APPOINTMENT

- Associate Professor and Head of the Geomatics Division, School of Architecture, Planning & Geomatics, University of Cape Town, 01/2011-12/2015
- Senior Lecturer and Head of the Geomatics Division, School of Architecture, Planning & Geomatics, University of Cape Town, 01/2009-12/2010
- Senior Lecturer, Geomatics Division, School of Architecture, Planning & Geomatics, University of Cape Town, 01/2006-12/2008
- Manager (founding member), AfriMap Geo-Information Services CC, 04/2003 current
- Project Manager, Emoyeni Training Centre (Pty) Ltd/Emoyeni Survey Company (Pty) Ltd, 02/1998-04/2003
- Lecturer, Department of Geomatics, University of Cape Town, 02/1998-11/1998
- Senior Research Scientist, Department of Surveying and Geodetic Engineering, University of Cape Town, 08/1996 07/1997
- Part-time Lecturer, Department of Surveying and Geodetic Engineering, University of Cape Town, 02/1995 11/1996
- Survey Technician, Topographics (survey company), Cape Town, 07/1988-02/1989

AWARDS, DISTINCTIONS AND FELLOWSHIPS

PROFESSIONAL ACTIVITIES

Professional Registration (South African Council for Professional and Technical Surveyors):

- Professional Surveyor (Engineering): PS 1334
- Professional Photogrammetric Surveyor: PS 1335
- Professional GISc Practitioner: PGP 1333

Conference organisation:

- Member of the Scientific Committee for the Geomatics Indaba 2016, Ekurhuleni, South Africa, August 2016.
- Member of the Scientific Committee for the Earth Observation for Global Changes (EOGC 2015) conference, Al-Ain, United Arab Emirates, December 2015.
- Member of the Scientific Committee for the Geomatics Indaba 2015, Ekurhuleni, South Africa, August 2015.
- Member of the Scientific Committee for the ISPRS Conference on "Serving Society with Geoinformatics" (SSG 2013), Antalya, Turkey, November 2013.
- Technical Director, Conference of Southern African Surveyors (AfricaGEO), Cape Town, South Africa, May 2011.
- Member of the Scientific Committee of the 3rd Conference on Earth Observation for Global Changes (EOGC2011), Munich, Germany, April 2011.

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- Member of the Scientific Review Panel for the African Association of Remote Sensing of the Environment (AARSE) 2010 Conference, Addis Ababa, Ethiopia, October 2010.
- Invited co-chair of a technical session on Remote Sensing and Geospatial Information Technology for Agricultural Decision Support, IGARSS 2009 conference, Cape Town, South Africa, July 2009.
- Member of the Technical Committee for the "Urban 2009: Urban Remote Sensing Joint Event", Shanghai, China, May 2009.
- Member of the Scientific Committee for the 2nd International Conference on Earth Observation for Global Changes, Chengdu, China, May 2009.
- Invited speaker at the opening plenary, and technical session chair, for the Free and Open Source Software for Geospatial Conference (FOSS4G), Cape Town, South Africa, October 2008.
- Conference Director of a Global Dialogues on Emerging Science and Technology: Geospatial Science for Sustainable Development Conference, Cape Town, South Africa, March 2008. This conference was jointly sponsored by the US State Department, UCT (Geomatics Division) and the Chief Directorate: Surveys and Mapping.
- Co-organiser of the Map Middle East Conference, Dubai World Trade Centre, Dubai, United Arab Emirates, March 2007. This conference was co-organised by the International Society for Photogrammetry and Remote Sensing (ISPRS) whom I represented for the review of papers and setting up the conference agenda.

Professional Committees:

- Member of the African Research Excellence Fund College of Experts, 2015 current
- South African representative to the International Cartographic Association (ICA) Commission on Sensor-driven Mapping of, 2015-2019
- Editor-in-Chief of the South African Journal of Geomatics, 2014 current
- Member of Editorial Board of the International Journal of Spatial, Temporal and Multimedia Information Systems, 2013 current
- Member of the Editorial Board of the Journal of Experimental Agriculture & Horticulture, 2013 current
- Chair of ISPRS Working Group VII/4 on Methods for Image Classification, 2012 2016
- President of the South African Society for Photogrammetry and Remote Sensing, 2011 current
- South African representative to the ISPRS, 2011 current
- Director of CONSAS CONFERENCE (Sect 21: non-profit organisation) responsible for promoting Geomatics education in Southern Africa, 2011 current
- Member of the Editorial Board for the South African Journal of Geomatics, 2011 current
- Member of the Management Board for the South African Journal of Geomatics, 2011 current
- Member of the Sub-Committee for Education and Training, of the Committee for Spatial Information (CSI), Department of Rural Development and Land Reform, South Africa, 2011- current
- South African representative to the International Cartographic Association (ICA), Commission on Mapping from Remote Sensor Imagery, 2011-2015
- Co-Chair of ISPRS Working Group VII/4 on Methods for Land Cover Classification, 2008-2012
- South African representative to the International Cartographic Association, Commission on Mapping from Satellite Imagery, 2007-2011
- Member of the Geographic Information Society of South Africa (Serve on the Education Committee and have been active in the review and development of the Geographic Information Systems component of the Geography curriculum), 2005 current
- Member of the South African GIS Standards Generating Body (Member of the South African Qualifications Authority committee responsible for the development of unit standards in Geographic Information Systems), 2004-2005

PUBLICATIONS AND RESEARCH

Dr. Smit is the Editor-in-Chief of the South Africa Journal of Geomatics and has authored 51 academic papers published in journals and conference proceedings. He is a reviewer for numerous peer-review journals and serves on a number of journal editorial boards. Dr. Smit has been actively involved in the organisation of a number of local, regional and international conferences and has served as a scientific committee member for numerous international conferences. His research focusses on the development of low cost photogrammetry and remote sensing methods for application in environmental and urban monitoring. Dr. Smit plays a significant role in the South African Geomatics industry and consults regularly with professional bodies and government on matters related to spatial data acquisition and management. He is the current President of the South African Society for Photogrammetry and Remote Sensing.