# **Zhuo Chen**

278 Longfellow Dr. z Waterloo, Ontario, N2L 2S1

## SUMMARY OF QUALIFICATIONS

- Abundant knowledge and skills on remote sensing image processing
- Experience of LiDAR data processing, analytics, and transformation
- Mastery of computer science and programming (knowledge of C, C++, SQL; knowledge of Python, Java, MATLAB).
- Experience of AutoCAD and PCI
- Good understanding and application of both Geographical Information Systems and Geodatabase
- Strong math background
- Excellent capability of studying new knowledge and techniques rapidly
- Outstanding analytical skills involving solution
- Strong teamwork cooperation

#### **EDUCATION**

Candidate Master of Science, Geography (Geomatics), University of Waterloo, Waterloo, ON, Canada, September 2016 - Present

**Bachelor of Environmental Studies,** Geomatics, Honours, Computer Science minor, University of Waterloo, Waterloo, ON, Canada, September 2014 – December 2015

- **Relevant courses:** Remote Sensing Project; Geographic Information Systems Project; Spatial Databases; Advanced Remote Sensing Techniques; Advanced Geographic Information Systems; Applications Software Engineering
- On the Dean's Honours List, Winter 2015 term, Spring 2015 term
- Cumulative Avg: 83.6; Major Avg: 83.0

**Bachelor of Environmental Studies,** Geographical Information System, Wuhan University, Wuhan, Hubei, China, September 2012- July 2016

- Relevant courses: C Programming Language; Object-Oriented Programming and Design (C++); MATLAB Application for Math; Object-Oriented Programming in Java; Advanced Mathematics 1&2; Digital Photogrammetry; Digital Mapping and GPS; Computer-aided mapping
- Cumulative Avg: 83.13

#### TEACHING ASSISTANTSHIP EXPERIENCE

#### University of Waterloo, Waterloo, ON, Canada

September 2016 - Present

Provided competent and reliable teaching assistantship to third-year students for Geodatabase. Guiding students in developing geodatabase and data module via holding tutorial lab, solving problems, grading, and providing feedbacks.

z338chen@uwaterloo.ca 519 781 4809

#### **RESEARCH & PROJECTS**

Integration of Optical and SAR Satellite Images for Impervious Surface Estimation to Support Chloride Concentration Monitoring in the Kitchener-Waterloo Region. (2015, Chen, Li, Kong & Rahman)

- ♦ Analysis and comparison of Multispectral and SAR remote-sensing images, and their combination
- ♦ Analysis and comparison of Support Vector Machine and Random Forest classification
- ♦ Programming on R
- ♦ Analysis of urban-area change

Seeking Optimal Locations for New Electric Vehicle Charge Stations in New York State, USA: A Site Suitability Analysis. (2015, Chen, Bundrea, Qiu & Schira)

- ♦ Decision making and multi-criteria analysis
- ♦ Urban analysis and planning

A Review of Data, Segmentation, and Classification of Object-Based Classification Related to the Extraction of Impervious Surfaces. (2015, Chen)

The Negative Environmental Impacts of Mercury Mining in Guizhong Province, China. (2015, Chen)

The Feasibility of Utilizing CCTV to Reduce Crime in Vancouver, Canada. (2015, Chen)

Using total station and AutoCAD software to measure and map the Wuhan University. (2014, Chen, Xie, Gao & Zhang)

#### PRESENTATIONS/CONFERENCES

- Attended Canadian Association of Geographers of Ontario Conference (CAGONT), October 2016
- Seeking Optimal Locations for New Electric Vehicle Charge Stations in New York State, USA: A Site Suitability Analysis, GEOG 481 University of Waterloo, August 2015
- Integration of Optical and SAR Satellite Images for Impervious Surface Estimation to Support Chloride Concentration Monitoring in the Kitchener-Waterloo Region, GEOG 471 University of Waterloo, April 2015
- The Feasibility of Utilizing CCTV to Reduce Crime in Vancouver Canada, GEOG 293 University of Waterloo, April 2015

### **VOLUNTEER EXPERIENCE**

- A volunteer, the 2+2 program, the faculty of Environment,
- A member of the China Young Volunteers Association

2015

2012-2013