

JIAAO GUO

✉ Jiaao.guo1@ucalgary.ca

EXPERIENCE

Project Leader; Research Assistant, QUEST

January 2019 – Current

- Developed / implement mapping “toolkit” for the Accelerating Implementation of Renewable Energy (AI-RE) project in Canmore, Alberta, funded by Quality Urban Energy Systems of tomorrow (QUEST)

GIS Analyst, Family Medicine at Cumming School of Medicine, University of Calgary

December 2018 – Current

- Developed and maintain a map of influenza outbreak in Alberta, Canada

GIS Consultant, Sustainable Calgary

May 2018 – May 2019

- Developed population density maps for *Healthy Places: Designing for Health in Alberta*
- Provided geocoding of collision sites for Montreal, Canada (on-going study)

EDUCATION

Master of Geographic Information System, University of Calgary

September 2017 – August 2019

- Course taken include advanced GIS, GIS-based Python programming, urban GIS, remote sensing, spatial-statistics. GPA: 3.91 out of 4.0
- Graduation Thesis: “Mapping Renewable Energy Capacity in Canmore, Alberta: Implementing a Standardized Mapping Framework and GIS-based MCDA”

BSc, Honor Specialization in Environmental Science, University of Western Ontario

September 2013 – April 2017

- Course taken include GIS, decision making in GIS, cartography, and remote sensing
- Thesis: “Estimating the Complete Surface Temperature of the Greater Toronto Area” using MODIS thermal bands and Environment Canada’s Surface Prediction System

SKILLS

GIS: ESRI’s ArcGIS Desktop, ArcGIS Online, and ArcGIS Pro; QGIS

Programming language: Python

Remote sensing: PCI Geomatica, ENVI, eCognition Developer, LASTool, Google Earth Engine API

Database management: SQL

Statistical tool: R, MATLAB

Microsoft Office (Word, Publisher, Excel, Outlook, Power Point)

Hardware: Experience in handling ASD FieldSpec spectrometer, and Etrex Vista GPS receiver

PUBLICATION

Guo, J., & Fast, V. (2019). Growing Up, Growing Out: Comparing Spatial Patterns Of Urban Populations in Canada. *Geomatica*, 73(2): 45-61. doi.org/10.1139/geomat-2019-0011

Guo, J., & Fast, V. (2019). Spatial Insights on Urban Density: A Case Study of Calgary. Proceedings of the 7th Conference on Spatial Knowledge and Information Canada, 7(3), 2. <http://ceur-ws.org/Vol-2323/>

Guo, J., Fast, V., Teri, P., & Calvert, K. (2020) Integrating Land-use and Energy Planning Decisions: A Technical Mapping Guide for Small Municipalities. *ISPRS International Journal of Geo-Information*. Under review: manuscript ID: ijgi-753193