Haitao Li, M.Sc.

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SUMMARY

Have been processing and analyzing data with GIS and remote sensing tools over 10 years; professional user and developer of GIS and remote sensing. Have strong ability to analyze data with statistics methods and tools.

Managed and coordinated projects over 10 years, have experience in QA/QC and report; Have experience to supply technical support to internal and external staffs.

Have been work on data of socioeconomic, public health, demography, agriculture, forest, hydrology, and oil/gas.

Over seven years experience in training people, supervising team, three year HR experience, have experience in keeping and extend internal and external network.

Strong ability of using computer, software, and computer language programming; expert in statistics and database.

Knowledge in documents and archive management.

PROFESSIONAL EXPERIENCE

Forest Management Research Assistant 2015

(Foothill Research Institute, Edmonton, AB)

- *Developing optimized strategies to restore or rehabilitate forest attached by mountain pine beetle;*
- *Developing integrated methods to build roads in forest;*
- *Developing model to maximize the socioeconomic and ecological output from timber and non-timber products;*
- *Developing tools to protect wild animal habits and reduce human activity impaction on watershed;*
- *Developing GIS software to manage forest, economics, and ecologic data.*

GIS Coordinator   2012-2014

(Alberta Biodiversity Monitoring Institute, Edmonton, AB)

- *I developed methods, work plan, optimize work flow, and codes to process data. These methods improved computers to process big size data efficiently and accurately;*

- *Performed spatial analysis and geostatistics;*

- *Interpreted Satellite imageries from 2000 to 2012 to identify the land cover/change, e.g. agriculture, forest management, seismic line, mining site. The data is using by internal and external groups, and the developed strategies to identify land cover are still used inside the team;*

- *Supported Monitor Centre to verify wetland zone, create spatial database, and processed the results;*

- *Generated graphs, charts, and slides using statistics and GIS software;*

- *Delivered data, and assigned tasks to technicians. Organized group meeting to increase the result accuracy and intra-group communication;*

- *Recruited, trained, and supervised technicians. Improved their ability to use GIS, and the training documents and material are still used by other teams;*

- *Provided technical support to internal and external staffs;*

- *Scientific study the relationship between oil/gas utilities and wild animal.*

Remote Sensing Research Assistant   2011-2012

(Department of Earth and Atmosphere Science, University of Alberta, Edmonton, AB)

- *Extract information from remotely sensed data;*

- *Field sampling and biometric data collection;*

- *Airborne imagery collection and analysis;*

- *Create new method to make calibrate sensors easier and faster;*

- *Develop source codes to process imagery and data from forest, agriculture field, and wetland;*

- *Technical support for research involving airborne remote sensing.*

Public Health GIS Specialist   2010

(Provincial Laboratory for Public Health (Microbiology), Alberta Health Service)

- *Mapping distribution of TB in Northwest Territory and MRSA in Alberta;*

- *Spatial analysis and build the distribution modelling with gene fingerprint data;*

- *Data cleaning and database management.*

Research Assistant   2008-2010

(Department of Renewable Resources, University of Alberta, Edmonton, AB)

- *Field work leader;*
- *Provenance trail and field plot data collection;*
- *biometrics data analysis;*
- *GIS and remote sensing data processing.*

GIS Specialist   2004-2007

(Kunming Institute of Botany, Chinese Academy of Science, China)

- *GIS Database management and analysis;*
- *Field work team leader;*
- *Biometric data collection and watershed monitoring;*
- *Remote sensing data processing;*
- *Ethnobotany;*
- *Biodiversity and ecology.*

Lecturer & GIS Developer   2000-2001

(Yuxi Teacher's College, China)

- *Leaded team to design and develop Socioeconomic GIS system (awarded by local government);*
- *Taught Introduction to GIS;*
- *Computer lab management;*
- *Technical support to staff and students.*

TECHNICAL SKILLS

GIS/RS data processing and management, geostatisctis, cartography, Web mapping, sensor calibration, aerial photo processing, hyperspectral, LiDAR, Statistics, programming, web page design

Software

GIS	ArcGIS, Mapinfo, GeoMedia, FME, Quantum GIS, AutoCAD
GIS API/	ArcGIS API, ArcGIS Online, Google Map API, Leaflet,
Web Mapping	Openlay, Mapnik
Remote Sensing	ENVI, ERDAS, PCI, eCognition
Data Analysis	R, SAS, SPSS
Languages/Scriptures	Python, IDL, VBA, VB, C, Basic, FORTRAN, Java, C#
Internet	HTML, CSS, JavaScript
Database	MySQL, Oracle, SQL Server
Multimedia software	GIMP, Inkscape, Photoshop, Illustrate, Scketchup, flash, Blender
Operate System	MS Windows, Linux/Unix, Mac OS

EDUCATION

M. Sc.   **University of Alberta**   **2010**

Forest Biology and Management in Department of Renewable Resources

Research areas: Phenology, plant adaptation, seedling selection, GIS, statistics, remote sensing

Thesis: *Genetic adaptation of aspen (Populus tremuloides) populations to spring risk environments: a novel remote sensing approach*

M.Sc.   **Nanjing University**   **2004**

GIS and Remote Sensing and in International Institute for Earth System Science

Research areas: remote sensing, GIS applications, data calibration and collection

Thesis: *The Generation of DEM with One-band Imagery*

B.Sc.   **Nanjing University**   **2000**

Cartography and GIS in Department of Geography

Study area: GIS, remote sensing, cartography, physical geography, computer science

Management Courses:

Fundamentals of Project Planning and Management	2014
Entrepreneurial Strategic Management.	2015