Qing Liu

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EDUCATION BACKGROUND

2010.9-Present Ph.D. Candidate in Geography (Graduate in August 2016)

Department of Geography & the Environment University of Denver (Denver, Colorado, USA)

Current Overall GPA: 3.80

2008.8–2009.12 Master of Science in Geographic Information Science

Department of Geography

Florida State University (Tallahassee, Florida, USA)

Overall GPA: 3.90

2002.9 – 2006.7 Bachelor of Science in Geographic Information Systems

Department of Geography

Nanjing Normal University (Nanjing, Jiangsu, China) Overall GPA: 84.92/100 Major GPA: 88.08/100

PROFESSIONAL EXPERIENCES

2012.6 Geospatial System Developer

- **Present** The Piton Foundation, Denver, CO
 - Development of geospatial web applications and desktop tools
 - Developing Public Geocoding Tool for online batch geocoding addresses with interactive shareable map visualizations
 - Developed Colorado Data Engine Metadata Application and desktop database management tool to work as the backend database architecture that Colorado Data Engine is built upon
 - Developed Mile High Connects Work Plan Management and Dashboard application for online management of Mile High Connects annual work plans with interactive dashboard visualizations, report builder, and quarterly reporting portal for participating non-profit organization members
 - Maintenance and administration of Piton's data warehouse
 - Administration of Piton'application servers on AWS
 - Data analysis and map production in support of applied research activities and foundation initiatives

2014.6 Research Assistant

- Present Department of Geography & the Environment, University of Denver, Denver, CO

• Developing a cloud-based 5D-Geovisualization online application for efficient

geovisualization of massive climate data in 3D volumetric rendering, utilizing cloud computational cluster from dynamically configured remote servers on AWS.

2014.4 Student Representative and Board Member, Workshop Instructor

- 2015.9 Rocky Mountain Urban and Regional Information Systems Association (RM-URISA), Denver, CO
 - Participated in organizing RM-URISA activities, including organization development, young professional and student engagement, conferences and events.
 - Taught RM-URISA Python Basics for ArcGIS workshop series

2012.5 Student Developer

- **2012.9** Google Inc., Mountain View, CA
 - Google Summer of Code 2012 Student for OSGeo (The Open Source Geospatial Foundation) working on distance analysis tools for PostGIS Raster

2011.6 GIS Intern

- 2012.5 <u>Denver Regional Council of Governments (DRCOG)</u>, <u>Denver, CO</u>
 - Participated in DRCOG Built Environment Project
 - Assembled Parcels / Land Use Inventory for Denver regional area

2009.8 GIS Programmer

- 2010.6 Florida Resources and Environmental Analysis Center (FREAC), Tallahassee, FL
 - Developed Florida Images Inventory and LIDAR Data Inventory website
 - Participated in developing "iMap Invasives" web application for geo-tracking invasive exotic species in New York, Florida, and Virginia
 - Participated in developing Florida 2010 Census Rapid Response web application
 - Participated in reconstructing Florida Land Boundary Information System website

2009.5 Summer Internship

- 2009.8 Florida Resources and Environmental Analysis Center (FREAC), Tallahassee, FL
 - Geo-referenced Florida quad topographic images
 - Redesigned and rebuilt "Apalachee Bay Recollections and Changes" website

2006.6 Internship

- 2006.9 Nanjing Automation Institute of Water Conservancy and Hydrology, Ministry of Water Resource, Nanjing, China
 - Participated in developing Flood Control Decision Support System for Nanhui District in Shanghai, China

2004.6 Research Assistant

- 2004.8 Department of Geography, Nanjing Normal University, Nanjing, China
 - Participated in developing Voice Navigation Online Campus Mapping System
 - Led a research team providing decision-making support on distribution of hospital in the urban core of Nanjing, China

HONORS

NASA World Wind Europa Challenge Third Place Academic Track

RM-URISA Outstanding Instructor

Graduate Studies Doctoral Fellowship for Inclusive Engagement

Dean's List Award

Nanjing Normal University Scholarship Second Prize, 6 consecutive semesters

Nanjing Normal University Social Practice "Outstanding Individual Award"

2015, NASA

2015, NASA

2015, NASA

2017, University of Denver

2009, Florida State University

2004-2006, NNU

2004, NNU

PUBLICATIONS

Liu, Qing; Sutton, Paul C.; Elvidge, Christopher D. (2011) *Relationships between Nighttime Imageryand Population Density for Hong Kong* Proceedings of the Asia-Pacific Advanced Network (APAN) 31stAsia-Pacific Advanced Network Meeting http://usymposia.upm.my/index.php/APAN_Proceedings/31st_APAN/paper/view/107

CONFERENCE PRESENTATIONS

- Conference presentation at AAG Annual Meeting 2015, Chicago, Illinois, U.S.A
- "Building a Web Application with Open Source Technology To Improve Access to Global Nighttime Lights Data" http://qliu.github.io/aag2015/
- Conference presentation at FOSS4G 2013 Annual International Conference of Free and Open Source Software for Geospatial, Nottingham, UK
- "Making Nocturnal Light Data More Accessible"

http://prezi.com/1f xt-smefuc/?utm campaign=share&utm medium=copy

- Conference presentation at AAG Annual Meeting 2012, New York, New York, U.S.A "Mapping Intra-Urban Land Use in Metropolitan Denver Area using Nocturnal Photography" http://mysite.du.edu/~qliu4/aag/
- Conference presentation at State Of The Map 2011 The 5th Annual International OpenStreetMap Conference 2011, Denver, Colorado, U.S.A.
- "The use of OpenStreetMap Registering Night-time International Space Station Photographs" http://www.fosslc.org/drupal/content/use-osm-registering-night-time-int%E2%80%991-space-station-photographs
- Conference presentation at 31st Asia-Pacific Advanced Network (APAN) 2011, Hong Kong, China "Relationships between Nighttime Imagery and Population Density for Hong Kong" http://www.apan.net/meetings/HongKong2011/Session/Slides/DMSP/4.pdf

SKILLS

GIS and RS ESRI ArcGIS, Quantum GIS, ERDAS IMAGINE, ENVI, IDRISI, TransCAD

Programming, Python, R, C, C++, VB, C#

Database, WebPostgreSQL, PostGIS, PL/pgSQL, Microsoft AccessDevelopment,Django, HTML, CSS, Javascript, ArcGIS JavaScript API

and Cloud Amazon Web Services, Google Cloud Platform

Computing Git, JMP, SPSS, Microsoft Office Suite – Word, Excel, PowerPoint

Languages English, Chinese (native language), Japanese (basic speaking and reading)