Beichen Tian

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EDUCATION

09/2016-08/2017 Department of Geography, **University of Wisconsin-Madison (Anticipated Summer 2017)**
  ʑ **Major:** Geographic Information System Capstone Certificate

09/2014-05/2016 Department of Urban and Regional Planning, **University of Wisconsin-Madison**
  ʑ **Major:** Urban and Regional Planning (M.S. degree, GIS & environmental planning emphases)

01/2013-12/2013 Department of Earth Science, **Emporia State University**
  ʑ **Major**: Earth Sciences (exchange program)

09/2010-01/2013 Department of Natural Resource & Urban Planning Management, **South China Normal University**
12/2013-07/2014
  ʑ **Major**: Natural Resource and Urban Planning Management (B.S. degree)

CERTIFICATIONS

ʑ **Geographic Information Systems Professional**|GISCI|Expiration: 3 Year Renewal Cycle
 Application In Progress|Passed Certification Exam on 06/15/2017
ʑ **ArcGIS Desktop Associate 10.1**|ESRI|Starting January 2016|Expiration: Never
 Certificate Code: EADA101|Verification#: RD18HYEK2NBEKX35
ʑ **LEED Green Associate**|USGBC|Starting May 2016|Expiration: Never
 Credential ID: 11053440-GREEN-ASSOCIATE

PROFESSIONAL EXPERIENCES

05/2017-Present **GIS Developer, Wisconsin State Cartographer's Office (Wisconsin SCO), UW-Madison**
- ʑ Debug and update the user interface for the web application 'Wisconsin Historic Aerial Imagery Finder v.2016'.
- ʑ Standardize Illinois land parcel query schemas (web links) and to test JSON geometry availability using Python.
- ʑ Use Python to convert JSON geometries to GeoJSON then export results to database table using QSpatiaLite.

12/2016-Present **Ecological GIS Technician, Department of Forest and Wildlife Ecology, UW-Madison**
- ʑ Digitize polygons and edit attributes for historical land cover maps of Wisconsin counties using ArcGIS.
- ʑ Merge/ georeference fragmented riparian townships using Photoshop and/ or ArcGIS.
- ʑ Manage digitized historical land use and PLSS data on Github.

10/2016-12/2016 **Group GIS Lead in Infectious Disease Mapping Challenge, U.S. Department of State**
- ʑ Mapped the geographic and temporal spread of recent vector-borne Yellow Fever in Central Africa.
- ʑ Overlapped and analyzed the disease's case distribution with social or environmental determinants of health.
- ʑ Briefed officials from D.C on research findings, which may be used to inform policy decisions.

Summer-2016 **ESRI User Conference Student Assistant, Environmental Systems Research Institute (ESRI)**
- ʑ Assisted with conference logistics and attendee registration.
- ʑ Prepared and monitored technical workshops.

06/2015-08/2015 **Comprehensive Transport Planning Intern, Transport Planning and Research Institute (TPRI), Ministry of Transport (Division of Integrated Transport Research)**
- ʑ Calculated road density and adjusted transportation network connectivity for the City of Quzhou, Zhejiang Province, by means of TransCAD.
- ʑ Prepared written report on regionalized parking policy zones for the transport planning of the City of Quzhou.
- ʑ Assisted multiple public participation meetings in the City of Quzhou during pre-planning stage.

12/2013-02/2014 **Urban Regional Planning Intern, Zhuhai Institute of Planning and Design**
- ʑ Assisted with GIS map drawing and archiving by using ArcGIS.
- ʑ Rectified multiple design-used CAD basemaps by using AutoCAD.
- ʑ Designed and created conceptual 3D city model of Hengqin Development Zone for the City of Zhuhai.

AWARDS & HONORS

05/2017 Honorable Mention for Barbara Bartz Petchenik Memorial Award in Cartographic Design, UW-Madison

02/2017 Runner-Up for Most Unique Map in WLIA Map Competition, Wisconsin Land Information Association
12/2016 Winning Team in Infectious Disease Mapping Challenge, U.S. Department of State
11/2016 ESRI 2017 Geodesign Summit Student Scholarship, ESRI
05/2016 1/4 Outstanding Graduation Project Presentation, UW-Madison
06/2014 1/3 Valedictorian in the Graduation Ceremony of School of Geography, SCNU
05/2014 School-Level Outstanding Graduation Dissertation, SCNU
12/2012 Third Prize in Future City at Sea Design Competition, SCNU
11/2012 Third Prize in "Leica Cup" Skills Competition (Urban Planning) in School of Geography, SCNU

RESEARCH PROJECTS

05/2017-08/2017 **Interactive Web Mapping for Pollinator Habitat Suitability Evaluation, Madison, Wisconsin (In Progress)**
- **Abstract:** There is a current demand for the City to geographically visualize its previous efforts and to explore potential environmental/ social disparities in the field of pollinator habitat protection. A user interface enabling GIS layer visualization and interaction was therefore brought up as a solution. The core purpose of this project is to design then implement such kind of interface on the basis of ArcGIS Online for the City.
- **Duties:** Author of the project; monthly report/ presentation to Madison Food Policy Council, park, engineering, and IT departments; documentation on GIS layer processing; lo-fi wireframes and operational workflow design; implementation of user interface and story map to be used by city staffs, urban beekeepers, and public.
- **Created cooperation opportunity between the City and Wisconsin SCO on post-stage project management**

12/2015-04/2016 **Suitability Evaluation and Neighborhood Design for Pollinator Habitat, Madison, Wisconsin**
- **Abstract**: This individual research project is a 25-page-long paper aiming at creating a more pollinator-friendly environment and a healthier local food system for the City. For implementing the goals, the project constructed a GIS-based suitability evaluation model to analyze the city's regional potential and environmental suitability to develop pollinator habitats. Based on the evaluation results, specific policy strategies combined with urban design graphics were provided as suggestions/recommendations for the local planning.
- **Duties**: Author of the project; suitability modeling literature review; interviews with city planners and with university entomology specialists; LiDAR point cloud data process for extracting vegetation cover; GIS weighting and rating system construction; "problematic" sites identification and analyses; urban space design.
- **Was awarded 1/4 Outstanding Graduation Project Presentation, UW-Madison**

09/2015-12/2015 **North Fish Hatchery Neighborhood Center Planning, Fitchburg, Wisconsin**
- **Abstract**: This planning project explores existing conditions, opportunities, and challenges in the North Fish Hatchery Road area, as they relate to the concept of potential development of a neighborhood center in the area. It addresses past studies, public participation, demographics, transportation/mobility, and land use.
- **Duties**: Group GIS analysis lead; mapped potential demographic issues for the region (e.g. segregations by income, race, and age group); collected, categorized, projected, and distributed GIS data for the entire group.

03/2011-12/2013 **Influencing Mechanism of Aquatic Ecosystem on Eco-development of "Sea Gull" Island, Guangzhou**
- **Abstract**: This research project aims to evaluate the land use developments and to propose potential solutions to local environmental issues for "Sea Gull" Island, which is currently the only alluvial island to be developed in Southern Guangzhou, China.
- **Duties**: Core GIS analyst; on-the-spot investigation; digitized current land use patterns using ArcGIS; calculated and analyzed statistics; analyzed advantages and disadvantages of regional industrial development and causes of water pollution; completed a land use planning map; wrote a paper "*Planning of Sea Gull Island*".
- **Was awarded third prize in "*Challenge Cup*" University Students Research Contest, SCNU**

03/2012-12/2012 **Analysis of Job Opportunities of GIS Major Students in China (taking Guangzhou as an example)**
- **Abstract**: This research project aims to analyze GIS majors and job opportunities in Guangzhou in order to provide practical suggestions about GIS study and employment to new GIS major graduates.
- **Duties**: Group lead; planned the research; interviewed with professors, recruiters and students; collected and analyzed statistics; created maps and wrote a paper.
- **Was awarded "*Outstanding Project of SCNU*"**

EXPERTISES & SKILLS
- **Coursework:** Human/Physical Geography, GIS, Cartography, Remote Sensing, Geocomputing, Geovisualization
- **GIS & Cartography:** ArcGIS 10.X, ArcGIS Pro, Web AppBuilder, ESRI Story Map, QGIS, ENVI 4.8, MapBox Studio
- **Design & Visualization:** Illustrator, InDesign, Photoshop (rudimentary), Blender, Sketchup, Lumion
- **Programming:** Python 2.7, GDAL/OGR, HTML/CSS, JavaScript/jQuery
- **Miscellaneous:** Microsoft Office (Word, Excel, PowerPoint, Visio), Google Earth, GPS locator