

ZHENG SHI

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EDUCATION

UNIVERSITY OF TEXAS AT DALLAS Richardson, TX
PhD: Geospatial Information Sciences Expect August 2024
Thesis topic Detecting Solar Panels with deep learning
Advisor Dr. Fang Qiu

UNIVERSITY OF TEXAS AT DALLAS Richardson, TX
Masters: Geosciences June 2019
Thesis topic Permian Basin Eastern Shelf Digital Well Mapping
Advisor Dr. Robert Stern

OCEAN UNIVERSITY OF CHINA Qingdao, Shandong
Undergraduate: Geo-Information Science and Technology July 2017
Thesis topic Study on Laoshan gravel

AWARDS AND HONORS

National Undergraduate Innovation Program , (Ocean University of China), 2015-2016

RESEARCH EXPERIENCE

UNIVERSITY OF TEXAS AT DALLAS Richardson, TX
Master Researcher, Geosciences Oct 2018 - May 2019

- Coordinated with Monadnock Resources company to produce 32 maps, including density, structure and oil filed
- Collected, analyzed and interpreted 237,553 wells' data to create a database using ArcGIS
- Converted available hard copy well maps into digital formats in ArcMap
- Assessed accuracy and quality for data processing with the method of statistics
- Gridded and produced structure maps for Permian Basin area using 3D visualization formats
- Performed geospatial analysis of the oil fields to attain digital well maps
- Determined existing oil producing zones and made comparison with current maps
- Integrated existing legal documents and the results to assist business decision for future drilling plan

OCEAN UNIVERSITY OF CHINA Qingdao, Shandong
Undergraduate Researcher, Geo-Information Science and Technology Jun 2015 - Apr 2016

Curriculum Vitae

Purpose: Discovered the distribution and diffusion law of suspended sediment in the east China sea based on satellite remote sensing technology, funding 8,000 RMB

- Planned and executed 12 months' data processing and organized large datasets into parts using ArcGIS software
- Utilized satellite remote sensing method and employed historical data to implement data modification using ENVI
- Calculated the change of wind field, sea surface temperature and suspended sediment and derived the diffusion law of suspended sediment
- Generated maps diagramming sea surface temperature and suspended sediment distribution and ocean flow
- Discovered distribution and diffusion law of suspended sediment in East China sea and compiled them to a paper
- Collaborated with three members to regularly reported the progress to supervisor and document research data

RESEARCH INTERESTS

Deep learning in remote sensing
Areal interpolation
Object detection using areal imagery

TECHNICAL SKILLS

Data visualization/ESRI/Python/SQL/Big Data/Web App/Map and Data Analysis/Oil and Gas/Deep learning/Machine learning

PRESENTATIONS

AAG Annual Conferences 2020: "Areal interpolation for population distribution using Zillow housing data"

TEACHING EXPERIENCE

UNIVERSITY OF TEXAS AT DALLAS
Graduate Teaching Assistant, Geospatial Information Sciences

Richardson, TX
Aug 2019 – Present

GIS workshop
Applied GIS
Remote sensing fundamentals

Curriculum Vitae

Advance GIS

GIS fundamentals

Solving issues happened during classes to keep everyone on the same page

Administrating software licenses and updating labs software.

LEADERSHIP AND SERVICE

Team leader, Ocean University of China, Student environment protection association, 2014-2017

Earth Hour Activity, OU China March 2014-April 2014

- Raised the public awareness of environmental protection
- Proposed the light saving night for dormitories near the road