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| **Shan Ye** | *https://yeshancqcq.github.io*  shan.ye@wisc.edu | |
| 1215 W. Dayton St., Madison, WI 53706 734-548-0205 | |
| **EDUCATION** |  |  |
| **University of Wisconsin-Madison**, Ph.D. in Geoscience, Minor in Computer Sci. | | *2018 – 2022 (exp)* |
| * Cyberinfrastructure and software development for geoscience | |  |
| * Spatiotemporal data analysis in paleoclimate & data-model comparison | |  |
| **University of Tulsa**, M.S. in Geosciences | | *2016 – 2018* |
| * Numerical analysis (Finite Element Method) on geomechanics (buckling fold) | |  |
| * Geospatial analytics on induced seismicity in Oklahoma | |  |
| **University of Michigan**, B.S. in Earth and Environmental Sciences | | *2013 – 2015* |
| **Pennsylvania State University**, Geography – GIS | | *2011 – 2013* |
| **EXPERIENCE** |  |  |
| **Research Assistant (EarthCube),** University of Wisconsin-Madison | | *2018 – present* |
| * Software developer: developing frontend (data submission forms and interactive maps) and backend (data uploading functions, database and API) of the Sparrow (cosmogenic lab branch) – see *https://sparrow-data.org* | | |
| * Macrostrat: Validating the Cretaceous age model of Macrostrat database, and creating new polygons to enhance spatial resolution. Testing spatial and temporal queries with dinosaur data from PBDB – see *https://macrostrat.org* | | |
| * GeoDeepDive: utilizing NLP to extract spatiotemporal data regarding ice-rafted debris (IRD) in the past 5 million years from published literature. Located 30 IRDs from a test datasets of about 1000 randomly selected geoscience journal articles – see *https://geodeepdive.org* | | |
| **Internship in Geophysics,** Chinese Academy of Sciences | | *2015 – 2016* |
| * Research on seismic data processing, visualization and interpretation regarding shale gas reservoirs | | |
| **GIS Analyst,** University of Michigan | | *2013 – 2014* |
| * Created 3D models of Michigan Basin and Lake Michigan based on geological and geospatial data | | |
| * Conducted spatial analysis and located hot spots of potential water pollution from hydrofracking | | |
| * Built interaction web maps to display mineral/fossil sample locations, data and pictures | | |
| **SKILLS** |  |  |
| * Expertise in Python and R; Working knowledge in C++, Java, JavaScript, HTML, CSS and SQL | | |
| * Software: ArcGIS, QGIS, PostgreSQL/PostGIS, GeoDa, ABAQUS, Illustrator, Petrel, Mathematica | | |
| **TEACHING** |  |  |
| * Temporary instructor in GEOL 4083 (GIS for geology), University of Tulsa | | *Spring 2018* |
| * Student instructor and grader in UC 270 (social justice), University of Michigan | | *2014 – 2015* |
| * Teaching intern in GEOG 363 (GIScience), Pennsylvania State University | | *Fall 2012* |
| **OTHERS** |  |  |
| * Translator of textbook *Exploring Geology* by Reynolds et al., English to Chinese | | *2019* |
| * President of AAPG University of Tulsa Chapter (awarded L. Austin Weeks grant) | | *2017 – 2018* |
| * Imperial Barrel Award competition as structural geologist and GIS analyst | | *Spring 2017* |
| * Geoscience and GIS outreach writer; more than 5 million accumulative views since Jan. 2018 | | |