

GESANGYANGJI

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EDUCATION

University of Wisconsin-Madison, US

Expected December 2019

M.S.: Atmospheric & Oceanic Sciences.

Certificate: Energy Analysis and Policy

Nanjing University of Information Science & Technology, China

September 2013 – June 2017

B.S.: Atmospheric Sciences

SELECTED RESEARCH & WORK EXPERIENCE

University of Wisconsin-Madison, Madison, US

January 2018-present

Graduate Research Assistant at the Center for Sustainability and the Global Environment (SAGE)

- Invest aerosol distribution and variations over Asia by analyzing variable satellite data
- Rescale historical meteorological observations to future scenario
- Calculate building design conditions for future 21st century
- Evaluate the impacts of climate change on the building design conditions in Madison, WI

Projects

- Study an O₃ Episode in Sheboygan, WI, based on EPA ground-based data, OMI satellite observation, and HYSPLIT back trajectory analysis
- Evaluate the economic and health benefit of replacing a coal fired power plant with wind energy system in Wisconsin based on EPA ground-based data and analysis of multiple models

GAGO BIG DATA Company, Beijing, China

June 2019-August 2019

Meteorological Data Analyst (Intern).

- Analyze and evaluate meteorological data predicted from different platforms
- Create an Application Programming Interface (API) for daily weather prediction from NCEP Global Forecast System (GFS)

Meteorological Administration of Tibet, China

November 2015 – February 2016

Weather Forecaster (Intern)

- Operated Meteorological Information Comprehensive Analysis and Processing System (MICAPS)
- Attend weekly Weather Watch and Weather Talk

HONORS AND AWARD

Professional Development Grant by Nelson Institute, UW-Madison

April 2019

OTHER EXPERIENCE

Student Supervisor, Sett Pub of Union South, UW-Madison

March 2018-March 2019

Workshop, Introduction to Linux/Unix Workshop, Madison, WI

October 2018

Workshop, Data Carpentry R Language hands-on workshop, Madison, WI

August 2018

Volunteer, Dolphin & Whale Research and Coastal Conservation Program, South Africa

July 2016

SKILLS

Model: HYSPLIT, System Advisor Model (SAM), CO-Benefits Risk Assessment (COBRA)

Earth Science: NCAR Command Language (NCL), QGIS, Panoply

System: Windows, Linux/Unix, Mac

Data Science: Python, MATLAB

Language: Fluent in Tibetan, Mandarin and English

PRESENTATIONS

- [1] “The Transition of Wisconsin from Coal to Clean Energy”, Oral Presentation. EAP Capstone Project, UW-Madison, WI, May 2019.
- [2] “Spatial and Temporal Distribution of Aerosol Optical Depth over Asia from CALIPSO Observation”. Poster Presentation. Atmospheric, Oceanic and Space Sciences Poster Reception. UW-Madison, WI, April 2019.
- [3] “Characterizing the Aerosols over the Tibetan Plateau”. Poster Presentation. NASA Health and Air Quality Applied Sciences Team (HAQAST) 4th. meeting, UW-Madison, WI, July 2018.