

Weiye (Mavis) Mei

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EDUCATION

University of Michigan School for Environment and Sustainability

Master of Science, Natural Resources and Environment: Environmental Informatics

- Courses: Remote Sensing, Principle of GIS, Natural Resource Statistics

Ann Arbor, MI

April 2021

Zhejiang University School of Earth Sciences

Bachelor of Science, Geo-information Science and Technology

- GPA: 3.89/4.0, minor in Economics
- Academic Honors: China National Scholarship (Top 1%)

Hangzhou, China

July 2019

Israel Institute of Technology

Summer School Student, Image Processing Course

- Attended courses on sampling, quantization, image enhancement & reconstruction, transformation & compression
- Used digital imaging and MATLAB; received a final grade of 94 and ranking #1 in class

Haifa, Israel

Jul 2018 – Aug 2018

EXPERIENCE

University of Alberta

Research Intern

- Project Subject: Safety Evaluation of Horizontal Curves using LiDAR Data
- Used MATLAB to extract horizontal curves geometric features and implemented the methodology on 172 segments on 61 highways in the province of Alberta, Canada
- Built a crash prediction statistical model based on Safety Performance Functions

Edmonton, Canada

Jan 2019 – Apr 2019

Zhejiang University

Student Researcher

- Project Subject: High-Precision and Automatic Image Mosaic Based on UAV Remote Sensing
- Team Leader responsible for overall schedule, meetings and reporting
- Implemented Scale Invariant Feature Transform (SIFT) algorithm with C/C++ and OpenCV to extract feature points in the UAV remote sensing image
- Employed the BBF match algorithm and RANSAC to remove the incorrect matching points

Hangzhou, China

May 2017 – Apr 2018

Zhejiang University

Student Researcher

- Project Subject: Remote Sensing Image Processing Project
- Used C/C++ to build a platform and implement the input, display and output of remote sensing images in various formats, geometric correction, geometric transformation, smoothing, wavelet transform and linear stretch

Hangzhou, China

Oct 2017 – Dec 2017

Zhejiang University

Student Researcher

- Project Subject: Overlay Statistical Analysis with Vector Data and Raster Data
- Used GDAL to operate the raster data and vector data in order to obtain the statistics of overlay raster data
- Applied line sweep algorithm to determine the grid area to be counted and obtained the information of overlay pixel
- Customized solution for the problem of sharp angle and horizontal boundary line, in consideration of the aliasing circumstances

Hangzhou, China

Jul 2017 – Aug 2017

SKILLS AND INTERESTS

- **Languages:** English and Chinese
- **Software:** Microsoft Visual Studio, ENVI, Microsoft Office, ArcGIS, MATLAB, Google Earth Engine, WebStorm, Eviews, Adobe Indesign
- **Computer Language:** C/C++, R, Python, SQL, JavaScript, html
- **International Experience:** Participated in the Russian Cultural Study Program in St. Petersburg Polytechnic University, Russia; Participated in the British Cultural Study Program in University of Manchester, United Kingdom