

# Hang Tian

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## EDUCATION

- **University at Buffalo**, Buffalo, New York August 2021 – July 2023  
**Master of Science** – Geographic information science GPA:3.95 / 4  
**Course taken:** Univariate & Multivariate Statistics in Geography, GIS & Machine Learning, Locational Analysis, Advanced Remote Sensing
- **Nanjing University**, Nanjing, China September 2017 - June 2021

## SKILLS

**Bachelor's degree of science** – Human geography

- **ArcGIS Software manipulating**
  - ✓ 4+ years' experience of using ArcGIS pro software on geography course works & research programs.
- **Python programming & geocoding**
  - ✓ Familiar with data processing and cleaning using Python. Familiar with packages like 'pandas', 'numpy' and 'geopandas'.
  - ✓ Frequently use python for geocoding and data visualization.
- **R programming & geocoding**
  - ✓ Familiar with data processing and cleaning using R.
- **Remote Sensing Image Processing with ENVI and Python**
  - ✓ 3+ years' experience of processing remote sensing image with ENVI on geography course works & research programs.
- **Microsoft Office software basic skills**

## RESEARCH & PROGRAM EXPERIENCES

- Evaluating spatial homogeneity of temperature and air quality in New York state
  - ✓ A poster presentation on American Association of Geographers 2022, NYC.
  - ✓ Cleaning, integrating & calculating statistics for data collected using R.
  - ✓ Resampling and converting temperature raster data using ArcGIS.
- Comparing hourly & daily, static & dynamic PM2.5 exposure to Divvy bikeshare users in Chicago.
  - ✓ A research program from May 2022 to present.
  - ✓ Extract calibrated PM2.5 records using Python from Project Eclipse API, a Microsoft research program team.
  - ✓ Collecting, cleaning & integrating Bikeshare trips data from Divvy using Python.
  - ✓ Retrieve estimated bikeshare routes from Google directions API using Python.
  - ✓ Apply spatial-temporal statistics modeling to create PM2.5 surface using R.

- Random forest regression-based air temperature retrieval in New York state combining Landsat 8 images and multiple source data
  - ✓ Collecting surface air temperature (Ta) data at 32 stations from NOAA.
  - ✓ Extract digital number values of Landsat 8 remote sensing images at Ta stations from 2013 to 2022 using **Google Earth engine**.
  - ✓ Combining DEM (digital elevation model) and land cover data as input to estimate Ta based on a random forest model.