# Ruiqi Zhang

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Bio: I am a master student in the Department of Natural Environmental Studies, The University of Tokyo studying under Dr. Oguchi Takashi's supervision. My research interest currently lies mainly in geomorphology and hydrology.

### Education

### The University of Tokyo, Japan

4/18-now

- ■M.as, Environmental Science, to be conferred Apr. 2020
- **■**Coursework: Advanced Hydrology, Geosphere Change, Terrestrial Ecology, Environmental Information Science, Landscape Planning and Design.

■GPA: 4.00/4.00

# The University of Jilin, China

9/13-7/17

- B.S. in Geophysics
- Coursework: Petroleum Geology, Structure Geology, Seismology and Seismic prospecting, Radioactivity Exploration;
  - Calculus, Linear Algebra, Probability and Statistics, Numerical Modeling, Complex Computing and Analysis Integral Transformation:
  - Fundamentals of Programming in C language, Principles and Application of Matlab, Data Structures.
- GPA: 3.67/4.00; Ranking: 3/27 (Top 12%).

# **Academic Experiences**

■ The University of Tokyo

Japan

Sediment transport

Supervisor: Dr. Takashi OGUCHI

- Evaluate the scale effect of water discharge and suspended sediment concentration in the Yellow River Basin, China.
- Explain hydrological results with reference to topographic, climatic, and land use data.
- The University of Jilin

China

Optimal transport for seismic waves

Supervisor: Dr. Pengfei ZHAO

- Construct a stratigraphic model.
- Define the location of intersections taking the minimal travel time when seismic waves go through strata based on genetic algorithms in MATLAB.

### Evaluation of soil organic content

Supervisor: Dr. Zhiguo MENG

- Establish a forward model explaining the relationship between the brightness temperature and the content of soil organism.
- Conduct on-site experiments to investigate how organic content affects radiation

characteristics of microwave in soil.

• Establish an inversion model evaluating soil organic content based on field data and AMSR-E images.

### Conference

■Rui-qi Zhang and Takashi Oguchi. "Responses of suspended sediment yield to precipitation, topography and dam control in the Yellow River Basin, China." JPGU:5. 30 (2019). [poster]

### Honor

- The first prize of China Mathematical Contest in Modeling (Changchun city, China), 2016
- The first prize of China Mathematical Contest in Modeling (Changchun city, China), 2015
- First-class scholarship (for academic excellence GPA rank: 3/27), 2015
- Second-class scholarship (for academic excellence GPA rank: 4/27), 2014

## **Skills**

■ Computer: Proficient with ArcGIS, R, Matlab

■ Language: Chinese (native), English (fluent)