

SONG YING XU

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🎓 EDUCATION

China University of Geosciences (Wuhan), Hubei, China 09/2012 – Current

Major: Earth Exploration and Information Technology, Master & Doctor, Anticipated Graduation: 06/2019

China University of Geosciences (Wuhan), Hubei, China 09/2008 – 06/2012

Major: Earth Information Science and Technology, Bachelor

👨‍💻 WORK EXPERIENCE

The Institute of Crustal Dynamics, Beijing, China 08/2015 – 11/2016

Exchange Student Interferometric Synthetic Aperture Radar (InSAR) theory learning, seismic data processing

- Learned InSAR theoretical knowledge and microwave remote sensing knowledge
- processed coseismic deformation fields of multiple earthquakes
- Learned a lot about Linux programming and system

📄 ARTICLES

- Song Y., Niu R., Xu S., et al. Landslide Susceptibility Mapping Based on Weighted Gradient Boosting Decision Tree in Wanzhou Section of the Three Gorges Reservoir Area (China)[J]. ISPRS Int. Geo-Inf. 2019, 8, 4.
- Song Y., Niu R., Zhang J., et al. Comparison of Change Detection Methods in Remote Sensing [J]. Bulletin of the Institute of Crustal Dynamics, 2016(2).(In Chinese)
- Song Y., Niu R., Zhang J., et al. The Deformation Measurement of Laohushan Fault Based on the FRAM-SBAS Method[C]// Dragon 3 Final Results and Dragon 4 Kick-Off. Dragon 3 Final Results and Dragon 4 Kick-Off, 2016.

🐱 PROJECTS EXPERIENCE

Rapid monitoring and evaluation of major engineering geological disasters (National High-Tech Research and Development Program “863” project)

Python programming language running on QGIS.

- Responsible for the development of “Landslide Hazard Risk Monitoring and Evaluation System”
- The software system mainly used landslide geological disasters in the Three Gorges Reservoir Area
- The main demonstration object was to engineer and speed up the landslide sensitivity mapping process and provided reference for disaster prevention and early warning in the reservoir area

Geological environment remote sensing monitoring application subsystem (China Geological Environment Monitoring Institute)

C++/Qt programming language.

- Responsible for the development of the software system
- The software system took geological disasters such as landslides, collapses and mudslides as the main research objects, and used “pipeline” tools to extract and process the hazard factors, providing a basis for geological environment monitoring

Julia-IntelliJ

<https://github.com/ice1000/julia-intellij>

Julia plugin for JetBrains IDEs, compatible with all JetBrains Products.

- Semantic-based highlights, quick fixes, completion, parameter hint, special input mode for Unicode characters.
- Use Markdown plugin to highlight doc strings, provides REPL and SciView (showing the output of Plot libraries).

💖 ACHIEVEMENTS

Aug. 2015

⚙️ SKILLS

- **Programming Languages:** multilingual developer (not limited to any specific language), and especially experienced in Java/Python/C#/Matlab, comfortable with C/C++/Java Script/TeX
- **Software:** ArcGIS, ENVI, SARscape, Matlab, SPSS

- **Developing Tools:** can adapt to any editors/OSs, usually use Visual Studio Code or Visual Studio 2015 under Windows 10

i MISCELLANEOUS

- Love making friends