# ../../../Downloads/my_orcid_qrcode.pngCurriculum Vitae

**Teng Wang**

Assistant Professor

School of Earth and Space Sciences, Peking University

[orcid.org/0000-0003-3729-0139](https://orcid.org/0000-0003-3729-0139)

Email: [wang.teng@pku.edu.cn](mailto:wang.teng@pku.edu.cn)

**Education**

* B.S., Geographic Information System, Wuhan University, Wuhan, P. R. China, 9/1999 - 7/2003
* M.S., Photogrammetry and Remote Sensing, Wuhan University, Wuhan, P. R. China, 9/2003-7/2006
* Ph.D., Information Technology, Politecnico di Milano, Milan, Italy, 1/2007 - 1/2010
* Ph.D., Photogrammetry and Remote Sensing, Wuhan University, Wuhan, P. R. China, 9/2006-7/2010

**Appointments**

* 10/2018 - present Assistant Professor, School of Earth and Space Sciences, Peking University
* 09/2016 -10/2018 Senior Research Fellow, Earth Observatory of Singapore, NTU
* 02/2015 - 09/2016 Postdoctoral Research Scientist, Southern Methodist University
* 10/2010 - 02/2015 Postdoctoral Research Fellow, King Abdullah University of Science and Technology

**Research Interests**

* *Imaging Geodesy:* SAR/InSAR, time-series analysis, pixel-offset tracking, change detection
* *Geophysics:* earthquake and volcano deformation, large-scale tectonic deformation
* *Nature Hazards:* Landslides, infrastructure stability, urban subsidence, hydrological process

**Ph. D Thesis**

Multi-image InSAR Analysis over the Three Gorges Region: Techniques and Applications  
Supervisors: Prof. Fabio Rocca, Politecnico di Milano and Prof. Mingsheng Liao, Wuhan University.

**Participated Projects**

* NASA Earth Surface & Interior Program grant (2015-2017), NNX14AQ95G, led by Prof. Zhong Lu at Southern Methodist University, 519,484 US Dollar.
* Singapore National Research Fellowship grant (2013-2018), led by Prof. Sylvain Barbot at Earth Observatory of Singapore, 3,630,300 Singapore Dollar.
* SE Asia Seismology grant, led by Prof. Shengji Wei (2017-2018) at Earth Observatory of Singapore, 278,806 Singapore Dollar.

**Teaching Experiences**

* 1-credit InSAR course at University of Oregon, 2018
* Lectures about image cross-correlation at Prof. Hill’s class at EOS, 2015
* Lectures about SAR/InSAR at Prof. Jónsson‘s class at KAUST, 2011 - 2014
* Lecture about InSAR at Prof. Liao’s class at China University of Geoscience, 2010

**Academic Honors**

* IEEE Geoscience and Remote Sensing Society 2012 J-STARS Prize Paper Award, 2012
* Chinese Government Awardee for Outstanding Self-Financed Students Abroad, 2009
* Young Scientist Best Poster, On Dragon 1 Final Results and Dragon2 Kick Off Symposium 2008, Beijing (China), 21-25 April 2008.
* Travel Grant, On IEEE International Geoscience and Remote Sensing Symposium - IGARSS 2008, Boston (USA) 6-11 July 2008

**Synergistic Activities**

*Academic communication outside of the immediate organization:*

* Summer of 2011, three-month visiting of Prof. R. F., Hanssen’s group at Delft University of Technology, Netherlands;
* Summer of 2014, one-month visiting of Prof. J-P, Avouac’s group at Caltech.
* Spring of 2016, one-week visiting of Prof. D. Perissin’s group at Purdue University
* Summer of 2016, one-month visiting of Prof. Roland Bürgmann’s group at UC Berkeley

*Collaborators:* R. Bürgmann (UC Berkeley, USA); Z. Lu (Southern Methodist University, USA); J-P Avouac (Caltech, USA); R. F., Hanssen (Delft University of Technology, Netherlands); S. Jonsson (King Abdullah University of Science and Technology, Saudi Arabia); Daniele Perissin (Purdue University, USA); F. Rocca (Politecnico di Milano, Italy); Shengji Wei and Sylvain Barbot (Nanyang Technological University, Singapore).

**Full Publication list**

* 1. Hu, X., Lu, Z. and **Wang, T.**, (2018) Characterization of hydrogeological properties in Salt Lake Valley, Utah using InSAR, *J. Geophys. Res*, doi: 10.1029/2017JF004497
  2. Akoğlu, A, et al., Evidence for Tear Faulting from new Constraints of the October 23rd, 2011, Mw 7.1 Van (Turkey) Earthquake based on InSAR, GPS, Coastal Uplift and Field Observations *BSSA*
  3. Materna, K., et al., Source characteristics of the 2017 Mw 6.5 Moijabana, Botswana earthquake, a rare lower-crustal event within an ancient zone of weakness *EPSL*
  4. **Wang, T.\***, Q, Shi, M. Nikkhoo, S Wei\*, S. Barbot, D., Dreger\*, R. Bürgmann, M. Motagh & Qi-Fu C. (2018), The rise, collapse, and compaction of Mt. Mantap from the 3 September 2017, North Korean nuclear test, *Science*, doi: 10.1126/science.aar7230
  5. Dutta, R., Jónsson S., **Wang, T.**, and Vasyura-Bathke, H (2018), Bayesian Estimation of Source Parameters and Associated Coulomb Failure Stress Changes for the 2005 Fukuoka (Japan) Earthquake， *Geophys. J. Int*, doi: 10.1093/gji/ggx551
  6. Wei, S., M. Chen, X. Wang, R. Graves, E. Lindsey, **T. Wang**, Ç. Karakaş, & D. Helmberger (2017), The 2015 Gorkha (Nepal) earthquake sequence: I. Source modeling and deterministic 3D ground shaking, *Tectonophysics*, doi:10.1016/j.tecto.2017.11.024.
  7. **Wang, T.**, S. Wei, X. Shi, Q. Qiu, L. Li, D. Peng, R. J. Weldon, & S. Barbot (2018). The 2016 Kaikōura earthquake: Simultaneous rupture of the subduction interface and overlying faults. *Earth and Planetary Science Letters*, 482, 44-51.
  8. DeGrandpre, K., **Wang, T.**, Lu, Z., & Freymueller, J. T. (2017). Episodic inflation and complex surface deformation of Akutan volcano, Alaska revealed from GPS time-series. *Journal of Volcanology and Geothermal Research*, *347*, 337-359.
  9. **Wang, T.\***, DeGrandpre, K., Lu, Z., & Freymueller, J. T. (2018). Complex surface deformation of Akutan volcano, Alaska revealed from InSAR time series. *International Journal of Applied Earth Observation and Geoinformation*, 64, 171-180.
  10. Hu, X., Oommen, T., Lu, Z., **Wang, T.**, & Kim, J., (2017). Consolidation settlement of Salt Lake County tailings impoundment revealed by time-series InSAR observations from multiple radar satellites. *Remote Sensing of Environment, 202*, 199-209.
  11. Jiang, H., Feng, G., **Wang, T**.\*, & Bürgmann, R. (2017). Toward full exploitation of coherent and incoherent information in Sentinel‐1 TOPS data for retrieving surface displacement: Application to the 2016 Kumamoto (Japan) earthquake. *Geophys. Res. Lett.,* 44(4), 1758-1767
  12. Moore, J. D., Yu, H., Tang, C. H., **Wang, T.**, Barbot, S., et al., (2017). Imaging the distribution of transient viscosity after the 2016 Mw 7.1 Kumamoto earthquake. *Science*, 356(6334), 163-167.
  13. Shi, X., Wang, Y., Liu-Zeng, J., Weldon, R., Wei, S., **Wang, T.**, & Sieh, K. (2017), How complex is the 2016 M w 7.8 Kaikoura earthquake, South Island, New Zealand? *Science Bulletin*
  14. Schaefer, L. N., **Wang, T.**, Escobar‐Wolf, R., Oommen, T., Lu, Z., Kim, J., Lundgren P. R. & Waite, G. P. (2017). Three‐dimensional displacements of a large volcano flank movement during the May 2010 eruptions at Pacaya Volcano, Guatemala. *Geophys. Res. Lett.*, 44(1), 135-142.
  15. Hu, X., **Wang, T.**, Pierson, T. C., Lu, Z., Kim, J., & Cecere, T. H. (2016). Detecting seasonal landslide movement within the Cascade landslide complex (Washington) using time-series SAR imagery. *Remote Sensing of Environment*, 187, 49-61.
  16. Ruch, J.#\*, **Wang, T.**#, Xu, W., Hensch, M., & Jónsson, S.\* (2016). Oblique rift opening revealed by reoccurring magma injection in central Iceland. *Nature Communications*, 7.(joint-first-author).
  17. **Wang, T.\***, Poland, M. P., & Lu, Z. (2015). Dome growth at Mount Cleveland, Aleutian Arc, quantified by time series TerraSAR‐X imagery. *Geophys. Res. Lett.*, 42(24).
  18. Avouac, J. P.\*, Meng, L., Wei, S., **Wang, T.**, & Ampuero, J. P. (2015). Lower edge of locked Main Himalayan Thrust unzipped by the 2015 Gorkha earthquake. *Nature Geosci.*, 8(9), 708-711.
  19. **Wang, T.\***, S. Wei, & S. Jónsson (2015), Coseismic displacements from SAR image offsets between different satellite sensors: Application to the 2001 Bhuj (India) earthquake, *Geophys. Res. Lett.*, 42, 7022–7030.
  20. **Wang, T.\***, & Jónsson, S. (2015). Improved SAR amplitude image offset measurements for deriving three-dimensional coseismic displacements. *IEEE J. Sel. Top. Appl. Earth Observations Remote Sensing*, 8(7), 3271-3278.
  21. Wei, S., Barbot, S., Graves, R., Lienkaemper, J. J., **Wang, T.**, Hudnut, K., Fu, Y. & Helmberger, D. (2015). The 2014 M w 6.1 South Napa earthquake: A unilateral rupture with shallow asperity and rapid afterslip. *Seismological Research Letters*, 86(2A), 344-354.
  22. **Wang,** **T.\*** and Jónsson S. (2014). Phase Ramp Reduction in Interseismic Interferograms using Pixel-Offsets, *IEEE J. Sel. Top. Appl. Earth Observations Remote Sensing,* 7(5), 1709-1718
  23. **Wang, T.\***, Jónsson S. and Hanssen R. F (2014). Improved SAR Image Coregistration Using Pixel-Offset Series, *IEEE Geosci. Remote Sensing Lett.* 11(9), 1465 - 1469
  24. Hu, X., **Wang, T.**, and Liao, M. (2014). Measuring co-seismic displacements with point-like targets offset tracking, *IEEE Geosci. Remote Sensing Lett.* 11(1), 283 – 287
  25. Shi, X., Liao, M., Wang, T., Zhang, L., Shan, W., and Wang, C. (2014). Expressway deformation mapping using high-resolution TerraSAR-X images. Remote Sensing Letters, 5(2), 194-203.
  26. Perissin, D., and **Wang, T.** (2012). Repeat-pass SAR interferometry with partially coherent targets. *IEEE Trans. Geosci. Remote Sensing*, 50(1), 271-280.
  27. Liao, M., Jiang, H., Wang, Y., **Wang, T.**, and Zhang, L. (2013). Improved topographic mapping through high-resolution SAR interferometry with atmospheric effect removal. *ISPRS journal of photogrammetry and remote sensing*, *80*, 72-79.
  28. Liao, M., Tang, J., **Wang, T.**, Balz, T., and Zhang, L. (2012). Landslide monitoring with high-resolution SAR data in the Three Gorges region. *Science China Earth Sciences*, 55(4), 590-601.
  29. Perissin, D., and **Wang, T.** (2011). Time-series InSAR applications over urban areas in China. *IEEE J. Sel. Top. Appl. Earth Observations Remote Sensing*, 4(1), 92-100. (2012 IEEE J-STARS Prize Paper Award)
  30. **Wang, T.\***, Perissin, D., Rocca, F., and Liao, M. (2011). Three Gorges Dam stability monitoring with time-series InSAR image analysis. *Science China Earth Sciences*, 54(5), 720-732.
  31. **Wang, T.\***, Liao, M., and Perissin, D. (2010). InSAR coherence decomposition analysis. *IEEE Geosci. Remote Sensing Lett.*, 7(1), 156-160.
  32. Liao, M., **Wang, T.**, Lu, L., Zhou, W., and Li, D. (2007). Reconstruction of DEMs from ERS-1/2 tandem data in mountainous area facilitated by SRTM data. *IEEE Trans. Geosci. Remote Sensing*, 45(7), 2325-2335.

**Conferences**

1. **Wang, T.**, 2018 The rise, collapse, and compaction of Mt. Mantap from the 3 September 2017, North Korean nuclear test, Chinese Geophysical Union (CGU) Annual Meeting (***Invited talk***)
2. **Wang, T.,** Wei, S., and Barbot, S., Deriving 3D displacements from SAR amplitude images: Applications to earthquake, volcano and underground nuclear test, EGU General Assembly 2018 (***Invited talk***)
3. **Wang, T.,** Peng, D., Barbot, S., Wei, S. and Shi, X. September 3rd, 2017 underground nuclear test in North Korea: Results from satellite radar imagery and dislocation modeling. AGU Fall meeting, New Orleans, USA, 11-15 December 2017. (Presentation)
4. **Wang, T.,** Mehdi Nikkhoo, Mahdi Motagh, Shengji Wei, Sylvain Barbot and Roland Burgmann. September 3rd, 2017 underground nuclear test in North Korea: Results from satellite radar imagery and dislocation modeling. AGU Fall meeting, New Orleans, USA, 11-15 December 2017. (Presentation)
5. **Wang, T.,** Wei, S., Shi, X, Peng, D. and Barbot, S., Surface displacement during and after the 2016 Kaikōura earthquake revealed from SAR imagery 8th International INQUA Meeting on Paleoseismology, Active Tectonics and Archeoseismology (PATA), 13 – 16 November, 2017, New Zealand (Presentation)
6. **Wang, T.,** Peng, D., Barbot, S., Exploiting Sentinel-1 TOPS Data For Retrieving Large-scale Surface Displacement, AOGS 14th Annual Meeting 06 to 11 AUG, 2017. Singapore (presentation)
7. **Wang, T.,** Wei, S. and Barbot, S., Towards full exploitation of coherent and incoherent information in Sentinel-1 TOPS data for retrieving coseismic displacement: Applications to the 2015 Tajikistan, the 2016 Kumamoto and the 2016 Kaikoura earthquakes. Fringe 2017 Advances in the Science and Applications of SAR Interferometry and Sentinel-1 InSAR Workshop. Helsinki, Finalnd, 5 - 9 June 2017 (Presentation).
8. **Wang, T.** and Jónsson, S. Improve SAR image offsets by considering scattering characteristics: Application to coseismic displacement mapping. Fringe 2015 Advances in the Science and Applications of SAR Interferometry and Sentinel-1 InSAR Workshop. Frascati, Italy, 23 - 27 March 2015 (Presentation).
9. **Wang, T.**, Wei, S. and Jónsson, S. Cross-sensor SAR image offsets for deriving coseismic displacements: Application to the 2001 Bhuj (India) earthquake using ERS and Envisat data. AGU Fall meeting, San Francisco, USA, 15-19 December 2013. (Poster)
10. **Wang, T.,** and Jónsson, S. Three-dimensional coseismic displacements from high-resolution SAR images offsets. IEEE International Geoscience and Remote Sensing Symposium (IGARSS 2014), 13-18 July, 2014 Quebec, Canada. (Poster)
11. **Wang, T.,** Feng, G., Harrington, J., Akoglu, M. A., Jónsson, S., Haghshenas-Haghighi, M., and Motagh, M. Coseismic surface displacements from optical and SAR image offset tracking and preliminary fault model for the 24 Sep. 2013 southwestern Pakistan M 7.7 earthquake. AGU Fall meeting, San Francisco, USA, 9-13 December 2013. (Presentation)
12. **Wang, T.,** and Jónsson, S. Three-dimensional coseismic displacements from pointlike target tracking of high-resolution SAR images. AGU Fall meeting, San Francisco, USA, 9-13 December 2013. (Poster)
13. **Wang, T.** and Jónsson, S. Three-dimensional co-seismic displacements from point-like target tracking of high-resolution SAR images: Application to the 2011 Van (Turkey) earthquake. On The 2013 European Space Agency Living Planet Symposium Edinburgh, United Kingdom, 9-13 September 2013. (Poster)
14. **Wang, T.,** and Jonsson, S. (2012). A new InSAR coregistration strategy for geophysical applications. On IEEE International Geoscience and Remote Sensing Symposium - IGARSS 2012, Munich, German 22-27 July 2012 (Poster)
15. **Wang, T.,** Jónsson, S. and Hanssen F. R., Coregistration between SAR Image Subsets Using Pointwise Targets, In Proc. Fringe2011 Advances in SAR Interferometry from ENVISAT and ERS missions, ESRIN Frascati, Italy, 18 - 23 September, 2011. (Poster)
16. **Wang, T.**, Perissin, D., Rocca, F., and Liao, M., Three Gorges Dam Monitoring by Means of Temporal SAR Image Series Analysis on International Workshop on Spatial Information Technologies for Monitoring the Deformation of Large-Scale Man-made Linear Features, Hong Kong, China, January 11-12 2010 (Presentation)
17. **Wang, T.,** Perissin, D., Liao, M., and Rocca, F. (2008). Deformation monitoring by long term D-InSAR analysis in Three Gorges area, China. On IEEE International Geoscience and Remote Sensing Symposium - IGARSS 2008, Boston, USA July 6-11 2008 (Presentation)