**Yujie Zheng**

Curriculum Vitae

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| Department of Geoscience  School of Natural Sciences and Mathematics  University of Texas at Dallas  800 W. Campbell Rd.  Richardson, TX | Email: [yujie.zheng@utdallas.edu](mailto:yujie.zheng@utdallas.edu)  www.yujiezheng.me  <https://orcid.org/0000-0001-9013-451X>  [Google Scholar Page](https://scholar.google.com/citations?user=T4j9T94AAAAJ&hl=en)  Phone: 650-946-6358 |

**Education**

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| Stanford University, Stanford, CA |  |
| Ph.D., Geophysics, January 2020   * Thesis title: Imaging Cascadia slow slip events with modern interferometric synthetic aperture radar datasets * Committee: Howard Zebker (principal advisor), Paul Segall, Eric Dunham, Dustin Schroeder | |
| Peking University, Beijing, China |  |
| Bachelor of Science in Geophysics, July 2014Bachelor of Economics, July 2014 | |
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**Employment and Research Experience**

## Assistant Professor, University of Texas at Dallas 2023 – present

## Postdoctoral Scholar, California Institute of Technology 2019 – 2023

## Research Assistant, Stanford University 2014 – 2019

## Undergraduate Research Assistant, Peking University 2012 – 2014

**Peer-Reviewed Publications**

[9] **Zheng, Y.**, Fattahi, H., Agram, P., Simons, M., and Rosen, P., (2022), On closure phase and Systematic Bias in Multi-looked SAR Interferometry. *IEEE Transactions on Geoscience and Remote Sensing,* [http://doi.org/10.1109/TGRS.2022.3167648](https://ieeexplore.ieee.org/document/9758802)

[8] **Zheng, Y.**, Laura Blackstone and Segall, P., (2022), Constraints on absolute magma chamber volume from geodetic measurements of Trapdoor faulting in the Galapagos. *Geophysical Research Letters,* <https://doi.org/10.1029/2021GL095683>

[7] Wang, T., **Zheng, Y.**, Pulvirenti, F., Segall, P., (2021).Post-2018 caldera collapse re inflation uniquely constrain Kilauea’s magmatic system, *Journal of Geophysical Research: Solid Earth*, <https://doi.org/10.1029/2021JB021803>

* AGU Eos research spotlight: [Volcanic Tremor and Deformation at Kilauea](https://eos.org/research-spotlights/volcanic-tremor-and-deformation-at-kilauea)

[6] **Zheng, Y.**, Zebker, H.A., and Michaeledes, R.J., (2021). A New Decorrelation Phase Covariance Model for Noise Reduction in Unwrapped Interferometric Phase Stacks, *IEEE Transactions on Geoscience and Remote Sensing,* <https://doi.org/10.1109/TGRS.2021.3050087>

[5] **Zheng, Y.**, Zebker, H.A., and Michaeledes, R.J., (2020) "A Physics-Based Decorrelation Phase Covariance Model for Effective Decorrelation Noise Reduction in Interferogram Stacks," *2020 IEEE International Geoscience and Remote Sensing Symposium*, [http://doi.org/10.1109/IGARSS39084.2020.9323237](https://ieeexplore.ieee.org/abstract/document/9323237)

[4] Michaelides, R.J., Zebker, H.A., **Zheng, Y.,** (2019).An Algorithm for Estimating and Correcting Decorrelation Phase from InSAR Data Using Closure Phase Triplets. *IEEE Transactions on Geoscience and Remote Sensing*, <http://doi.org/10.1109/TGRS.2019.2934362>

[3] **Zheng, Y.** and Zebker, H.A., (2017). Phase Correction of Single-Look Complex Radar Images for User-Friendly Efficient Interferogram Formation. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 10(6), <http://doi.org/10.1109/JSTARS.2017.2697861>

[2] Zebker, H.A. and **Zheng, Y.** (2016), Robust and efficient InSAR deformation time series processing, *2016 IEEE International Geoscience and Remote Sensing Symposium*, [http://doi.org/10.1109/IGARSS.2016.7729827](https://ieeexplore.ieee.org/abstract/document/7729827)

[1] **Zheng, Y.** and Zhou, S., (2014). The spatiotemporal variation of the b-value and its tectonic implications in North China. *Earthquake Science*, [https://doi.org/10.1007/s11589-014-0086-8](https://link.springer.com/article/10.1007/s11589-014-0086-8)

**Invited Talks**

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| Oct 2023 | **Southern Methodist University,** Department seminar |
| Nov 2022 | **University of Texas, Dallas,** Department seminar |
| Sep 2022 | **NISAR Community Science Workshop (**[**recorded talk**](https://nisar.jpl.nasa.gov/resources/192/closure-phase-bias-signal-or-noise/)**)** |
| April 2022 | **Ohio State University,** Department seminar |
| March 2022 | **The University of Hong Kong,** Department seminar |
| March 2022 | **University of Texas, Dallas,** Department seminar |
| Jan 2022 | **Indiana University,** Department seminar |
| Dec 2021 | **Midwestern State University**, Department seminar |
| Nov 2021 | **SCEC Community Geodetic Model Workshop** |
| Oct 2021 | **Southern Methodist University**, Radar Lab guest lecture |
| Nov 2020 | **Caltech Institute of Technology**, Seismology lab seminar |
| Oct 2018 | **University of California, Berkeley**, Active tectonic group seminar |

**Selected Conference Presentations**

*\*Oral presentation \*\*Invited*

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| Sep 2023 | \***Zheng, Y.**, Fattahi, H., Modeling soil moisture with cumulated closure phase of interferometric SAR measurements. *Fringe 2023.* |
| Mar 2023 | **Zheng, Y.**, Simons, M.. Ups and Downs of Beverly Hills, California: Analysis of surface deformation from InSAR: 2015 – 2023. *GAGE/SAGE 2023 Community Science Workshop* |
| Dec 2022 | \***Zheng, Y.**, Fattahi, H., Modeling soil moisture with cumulated closure phase of interferometric SAR measurements. *AGU Fall Meeting*. |
| Dec 2021 | \***Zheng, Y.**, Fattahi, H., Agram, P., Simons, M., Rosen, P., On Closure phase and Systematic Bias in Multi-looked SAR Interferometry. *AGU Fall Meeting*. |
| Dec 2021 | \***Zheng, Y.**, Simons, M., Investigating land surface displacements over the San Gabriel Valley, California. *AGU Fall Meeting*. |
| Jun 2021 | \***Zheng, Y.**, Fattahi, H., Agram, P., Simons, M., On Closure phase and Systematic Bias in Multi-looked SAR Interferometry. *Fringe Workshop.* |
| Dec 2020 | **Zheng, Y.**, Fattahi, H., Agram, P., Simons, M., Assessing closure phase and its impact on InSAR time-series. *AGU* *Fall Meeting.* |
| Sep 2020 | \***Zheng, Y.**, Zebker, H.A. and Michaelides, RJ.,. A Physics-Based Decorrelation Phase Covariance Model for Effective Decorrelation Noise Reduction in Interferogram Stacks. *IEEE International Geoscience and Remote Sensing Symposium.* |
| Dec 2019 | \***Zheng, Y**. and Zebker, H.A., Are redundant interferograms really redundant? On the use of redundant interferograms to reduce noise. *AGU Fall Meeting.* |
| Dec 2018 | \*\***Zheng, Y.** and Zebker, H.A., Slow Slip Events in Cascadia: Observation from Sentinel-1. *AGU Fall Meeting.* |
| Dec 2017 | \***Zheng, Y.**, and Zebker, H.A., Retrieving Ground Deformation Associated with Cascadia Slow Slip Events Using Sentinel-1 Data. *AGU Fall Meeting.* |
| Dec 2016 | **Zheng, Y.** and Zebker, H.A., Crustal deformation associated with Cascadia slow slip events from InSAR time-series, *AGU Fall Meeting* |
| Jul 2014 | **Zheng, Y.** and Zhou, S., The spatiotemporal variation of the b-value and its tectonic implications in North China, *International Workshop on Statistical Seismology* |
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**FELLOWSHIPS AND AWARDS**

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| 2017 | American Geophysics Union Outstanding Student Paper Award – Geodesy session |
| 2014 | The Joshua L. Soske Fellowship, School of Earth Sciences, Stanford University |
| 2012 | Peking University Principle’s Award for undergraduate research |
| 2012 | Chinese Universities Study Award, National University of Singapore |
| 2010 | The May 4th Fellowship, Peking University |

**Teaching and Mentoring Experience**

## Teaching Assistant, Stanford University

## GP90/ESS113 Earthquakes and Volcanoes, upper-level undergraduate course

* EE60N/GP60N Man versus Nature: Coping with Disasters Using Space Technology, Introductory Seminar for first-year undergraduate students.
* EE355/GP265 Imaging Radar and Applications, advanced graduate course

## Mentor, 2021-2022 Clean Water Science Network (CWSN) Mentorship Program

**Memberships and Service**

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| Membership | American Geophysical Union (2014 - present) Institute of Electrical and Electronics Engineers (IEEE) (2016 - present) |
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| Reviewer | IEEE Journal of Selected Topics in Applied Earth Observations and Remote SensingIEEE Transactions on Geoscience and Remote SensingIEEE Transactions on Parallel and Distributed SystemsIEEE Geoscience and Remote Sensing LettersIEEE International Geoscience & Remote Sensing SymposiumRemote Sensing of EnvironmentComputers and GeosciencesNature CommunicationsRemote Sensing in Earth System Science *NASA Experimental Program to Stimulate Competitive Research (EPSCoR 2017)* research proposal online reviewer |