YANGKANG CHEN

Bureau of Economic Geology
Jackson School of Geosciences
The University of Texas at Austin
Austin, Texas 78712-0254, USA
Email: yangkang.chen@beg.utexas.edu
Phone: (+1) 512-902-2026

EDUCATION

Ph.D., **Geophysics**, The University of Texas at Austin — Sep 2012-Dec 2015
B.S., **Geophysics**, China University of Petroleum (Beijing) — Sep 2008-Jun 2012

ACADEMIC APPOINTMENTS

Research Assistant Professor — Dec 2023 - Aug 2025
Research Associate Professor — Aug 2025 - Present
The University of Texas at Austin, Bureau of Economic Geology
Affiliated Faculty — Oct 2025 - Present
The University of Texas at Austin, Oden Institute for Computational Engineering and Sciences

- Lead in AI/ML research for Texas Seismological Network (TexNet)
- Co-PI (in charge of FWI) for Texas Consortium for Computational Seismology (TCCS)
- Director of AI center for geoscience (AI4GEO)
  AI4GEO is a research initiative for solving challenging geoscience problems using AI-backed data analysis, including but not limited to earthquake monitoring, seismic interpretation, enhanced seismic imaging, physics-driven geological modeling, multi-source data fusion, digital rock physics, and reservoir characterization. AI4GEO's ultimate goal is to develop cutting-edge techniques and unprecedented solutions for revolutionizing next-generation geoscientific research and problem-solving via big data analysis and AI.

Research Associate — May 2021 - Nov 2023
The University of Texas at Austin, Bureau of Economic Geology

- AI for observational seismology

Research Professor — Apr 2018-Apr 2021
Zhejiang University, School of Earth Sciences

- Intelligent, Fast, and Hiresolution Seismic Imaging

Distinguished Postdoctoral Research Associate — Apr 2016-Apr 2018
Oak Ridge National Laboratory, National Center for Computational Sciences

- Mapping the Earth's Interior Using Big Data

FUNDING

- "Collaborative Research: Frameworks: SeismicWeb: Distributed and Participatory Seismic Sensing and Computing Infrastructure for Earthquake Monitoring", $2.4 M, NSF, PI, pending, Chen's share: $1.6 M, 01/2026-12/2029.
- "Collaborative Research: CAIG: EQGPT: Enhanced earthquake monitoring using the generalized pre-trained transformer", $1.0 M, NSF, PI, pending, Chen's share: $360 K, 01/2026-12/2028.

- "Collaborative Research: GEARS: Enhancing Global Model of the CRUST with Multi-mode Body Waves", $780K, NSF, PI, pending, Chen's share: $400 K, 01/2026-12/2027.
- "NSF Safe-OSE: SCORE: Enhancing the next-generation computational science via Secure and stable COmmunity-driven REproducible research", $1.5 M, NSF, PI, pending, Chen's share: $1.5 M, 01/2026-12/2027.
- "Collaborative Research: NSFGEO: Development of Rocketquake Seismology for Exploring the Geology of Earth and Planetary Bodies", $680 K, NSF, Co-PI, pending, Chen's share: $200 K, 01/2026-12/2027.
- "Induced seismicity and their seismo-tectonic implication for Southeastern New Mexico", $200 K, New Mexico Tech, Co-PI, current, Chen's share: $100 K, 01/2027-12/2027.
- "Development and Validation of a High-Resolution 3D Seismic Velocity Model for Southeastern New Mexico Using Sonic Logs, Passive Seismic Tomography, and Earthquake Relocation", $200 K, New Mexico Tech, Co-PI, current, Chen's share: $100 K, 01/2027-12/2027.
- "Earthquake Early Warning & Fast Response System", $288 K, Texas Division of Emergency Management, PI, current, Chen's share: $288 K, 01/2026-12/2026.
- "Operationalizing Multi-Scale InSAR for Geohazard Assessment in the Permian Basin (postdoc-lead project)", $688,317.92, Co-PI, current, Chen's share: $260 K, 01/2027-12/2028.
- "Fast simultaneous source separation on land", $60K, Aramco, PI, current, Chen's share: $60K, 09/2025-08/2026.
- "Texas Consortium for Computational Seismology (TCCS)", around $600K per year, industry support, Co-PI, current, Chen's share: around $200K per year, 2025-Present.
- "AI-Accelerated Joint Integration of Production and 4D Seismic Data for Dynamic Reservoir Model Updating", UT-PGE seed fund, co-PI, current, Chen's share: $20K,
- "Enhancing Global Model of the CRUST with Multi-mode Body Waves", $80K, BEG seed fund, PI, current, Chen's share: $80K, 01/2025-12/2025.
- "Advancing AI research in seismic imaging", $15K, JSG Equipment Funding 2025, PI, current, Chen's share: $15K, 01/2025-12/2025.
- "Texas Seismological Monitoring Program", $3.4 M per year, Texas, Key Personnel (Team Lead of Machine Learning), current, Chen's share: $454,800 per year, 2021-Present.
- "Bluebonnet/Magnolia Sequestration Hub", $2.5 M, DOE, Key Personnel, current, Chen's share: $100K, 05/2023-04/2026.
- "Carbon Negative Reaction-driven Cracking for Enhanced Mineral Recovery: In-Situ Test at a Ni-Co-PGE Deposit", $5 M, DOE, Key Personnel, current, Chen's share: $200K, 05/2023-04/2026.
- "BP Lone Star Storage Hub/CarbonSAFE Phase 3", $2.5 M, DOE, Key Personnel, completed, Chen's share: $100K, 08/2023-07/2025.

AWARDS

- First Prize in GeoHackathon 2024 (Mentor) Oct 2024
- IEEE Senior Membership Sep 2023
- First Prize in AETA Earthquake Forecast Competition using AI Sep 2023
- Geophysics Bright Spots for paper "Imaging point diffractors using a low-rank approximation method" Sep 2023
- Top Cited Article Award for "Iterative Gaussian mixture model and multi-channel attributes for arrival picking in extremely noisy environments" published on Geophysical Prospecting Feb 2024
- Top Cited Article Award for "SCALODEEP: A Highly Generalized Deep Learning Framework for Real-time Earthquake Detection" published on JGR-Solid Earth Feb 2023
- Top Cited Article Award for "A Fully Unsupervised and Highly Generalized Deep Learning Approach for Random Noise Suppression" published on Geophysical Prospecting Mar 2022

- Stanford Top 2% Scientist since 2021
- IEEE GRSL Best Reviewer Award Apr 2021
- BEG publication awards 2015,2021-2023
- Clarivate Highly Cited Researcher Since 2020
- Geophysics Bright Spots for paper "Adaptive stabilization for Q-compensated reverse time migration" Feb 2018
- Geophysics Bright Spots for paper "CuQ-RTM: A CUDA-based code package for stable and efficient Q-compensated reverse time migration" Feb 2019
- Distinguished Postdoctoral Fellowship (Oak Ridge National Laboratory) Apr 2016-Apr 2018
- Graduate Research Scholarship, BEG, TCCS Aug 2012-May 2015
- *TOP 30 paper* award in SEG 2014 Denver Oct 2014
- Chevron Fellowship Sep 2014
- Marathon Geophysical Fellowship Jan 2014- Jun 2014

TEACHING

Lecture for graduate students (two lectures per semester) 2021-Present
The University of Texas at Austin, Jackson School of Geosciences
- Multidimensional Data Analysis

Lecture for graduate students 2018-2021
Zhejiang University, School of Earth Sciences
- Big Data Geosciences

SEG short course (8 hours in two days) instructor since 2026
Society of Exploration Geophysicists
- Deep Learning for Revolutionizing Seismic Data Processing

SERVICE

Editorial board service

- Lead organizer and editor of Geophysical Prospecting Special Issue: "Physics-based machine learning advances in geophysical prospecting" 2025
- Co-Lead organizer and guest editor of Machine Learning: Earth "Focus collection on AI and Machine Learning in Geophysics" 2025
- Lead organizer of AGU special collection (JGR,GRL,ESS) "Advanced machine learning in solid earth geoscience" 2024
- Editor for JGR-Machine Learning and Computation (seismology) since 2023
- Associate Editor for Geophysical Prospecting (ML and seismic processing) since 2025
- Associate Editor for IEEE Transactions on Geoscience and Remote Sensing (seismic data processing) since 2020

Journal review service

- Reviewers for Nature Communication, Scientific Reports, Scientific Data, Earth Science Review, Geophysical Research Letters, Journal of Geophysical Research - Solid Earth, Geophysical Journal International, Geophysics, Geophysical Prospecting, Interpretation, Surveys in Geophysics, AAPG Bulletin, Advances in Water Resources, Exploration Geophysics, Studia Geophysica et Geodaetica, Acta Geophysica, Journal of Petroleum Science and Engineering, IEEE Signal Processing Magazine, IEEE Signal Processing Letters, IEEE Geoscience and

Remote Sensing Letters, IEEE Transactions on Computational Imaging, IEEE Transactions on Industrial Electronics , IEEE Transactions on Image Processing, IEEE Transactions on Signal Processing, Sensors, Signal Processing, Digital Signal Processing, SEG/EAGE Annual Convention, etc. since 2013

Proposal review service

- Proposal reviewer for NSF since 2025
- Proposal reviewer for Chilean National Science and Technology Commission since 2018
- Proposal reviewer for universities (KFUPM, KAUST, etc.) since 2023
- Proposal reviewer for ORNL INCITE research projects since 2016
- Proposal reviewer for ORNL ALCF Aurora Early Science Program (ESP) since 2016

Conference organizer service

- Co-convener of the session "Machine learning applications in seismic data processing and imaging" at the IEEE International Geoscience and Remote Sensing Symposium in Washington DC 2026
- Lead convener of the session "Interdisciplinary Studies on Pre-Earthquake Processes with Advanced Models, Observations, and AI" at the JpGU-AGU Joint Meeting 2026
- Co-convener of the session "From Operations to Shakings: Tracing Induced Seismicity from Fluid Impacts Using Integrated Data" at the SSA Annual Meeting 2026
- Lead convener of the session "Towards Advancing Earthquake Forecasting and Nowcasting: Recent Progress Using AI-Enhanced Methods" at the SSA Annual Meeting 2024
- Lead convener of the session "Recent advances in forecasting/nowcasting and seismic hazard reduction" at the Japanese Geoscience Union (JpGU) Annual Meeting 2024
- Lead convener of the session "Geophysical data analysis and inversion in the era of artificial intelligence" at the IEEE International Geoscience and Remote Sensing Symposium in Pasadena, CA 2023
- Lead convener of the session "Beyond the Black Box—Advancing Geo-ML by Incorporating Context with Specialized Architectures, Benchmark Datasets, and Tailored Notions of Interpretability" at the AGU Fall Meeting 2023
- Chairman of SEG 2016 Annual Convention SPIR Oral-discussion Session 2016

Committee member service

- Technical Chair for SEG Passive Seismic Committee 2026-2027
- Committee member for GeoHackathon 2025 Organization Committee 2025
- Committee member for BEG Associate Director (Environment Div) Search Committee 2025
- Committee member for SEG Continuing Education Committee since 2025
- Committee member for IEEE/GRSS IGARSS 2025 Scientific Committee 2025
- Committee member for ORAU Seismic Community Advisory Committee 2025
- Chair for BEG Grants, Appointments & Awards Committee Service 2026-2027
- Committee member for BEG Grants, Appointments & Awards Committee Service 2024-2026
- Committee member for AGU-JGR-Machine Learning and Computation EIC Search 2024

OUTREACH

- Open-source enthusiast. Primary developers of Madagascar `https://www.reproducibility.org` and AASPIP `https://github.com/aaspip`.

- Advocator of reproducible research. Contributor of >100 reproducible research papers `https://github.com/chenyk1990/reproducible_research`.
- Media interviewee. Interviewed by UT Austin Media on success of AI-based earthquake forecasting, working on crafting a story at UT website (with 131 million unique page views for 25 days, among the top three science stories from UT Media): `https://news.utexas.edu/2023/10/05/ai-driven-earthquake-forecasting-shows-promise-in-trials/`.

SUPERVISION

Postdoc supervision

- Yiran Shen (supervised), postdoc supervision at The University of Texas at Austin
  3D diffusion model for FWI since 2026
- Xing Li (co-supervised), postdoc supervision at The University of Texas at Austin
  InSAR data analysis using AI since 2024
- Chao Li (supervised), postdoc supervision at The University of Texas at Austin
  Deep learning for full waveform inversion 2024-2026
- Ankit Chakraborty (co-supervised), postdoc supervision at The University of Texas at Austin
  HPC and FWI 2024-2025
- Jake Lee (co-supervised), postdoc supervision at The University of Texas at Austin
  S-wave sonic log prediction using AI 2022-2024
- Omar M. Saad (supervised), Postdoc in Geophysics at Zhejiang University
  Deep learning in earthquake seismology 2019-2021
- Guangtan Huang (supervised), Postdoc in Geophysics at Zhejiang University
  Well-log constrained seismic inversion 2019-2021
- Min Bai (supervised), Postdoc in Geophysics at Zhejiang University
  Time-domain Gaussian Beam Method in Seismics 2018-2020

Ph.D. supervision

- Moses Falowo (co-supervised), PhD in Geophysics at The University of Texas at Austin
  AI-assisted FWI for time-lapse monitoring 2026-2030
- Pengfei Zuo (co-supervised), Visiting PhD in Geophysics at The University of Texas at Austin
  Advanced methods for receiver function imaging 2021-2026
- Xinyue Gong (co-supervised), Visiting PhD in Geophysics at The University of Texas at Austin
  Diffusion Model for seismic reconstruction 2021-2026
- Tolulope Agbaje (co-supervised), PhD in Geophysics at The University of Texas at Austin
  Physics-driven sub-seismic fracture characterization 2023-2028
- Sujith Swaminadhan (co-supervised), PhD in Geophysics at The University of Texas at Austin
  Physics-guided deep learning for FWI 2023-2028
- Rebecca Gao (co-supervised), PhD in Geophysics at The University of Texas at Austin
  Geological characterization using deep learning 2020-2025
- Rui Gong (co-supervised), PhD in Geophysics at The University of Texas at Austin
  Full waveform earthquake location using deep learning 2023-2025
- Liuqing Yang (co-supervised), PhD in Geophysics at China University of Petroleum (Beijing)
  Intelligent seismic data processing and inversion 2020-2024
- Fangxue Zhang (supervised), PhD in Geophysics at Zhejiang University
  Intelligent seismicity characterization 2020-2024
- Hang Wang (supervised), PhD in Geophysics at Zhejiang University
  High-dimensional seismic data reconstruction and deblending 2019-2022

- Mi Zhang (co-supervised), PhD in Geophysics at China University of Petroleum (Beijing)
  ML and lowrank methods for incoherent seismic noise attenuation 2018-2022
- Chao Fu (co-supervised), PhD in Geophysics at Shandong University
  Predictive filtering in complex geological structure 2018-2022
- Yapo Abolé Serge Innocent Oboué (supervised), PhD in Geophysics at Zhejiang University
  Five dimensional seismic denoising and reconstruction 2018-2021
- Yuxiao Ren (co-supervised), PhD in Geophysics at Shandong University
  Deep learning full waveform inversion 2017-2021
- Xingye Liu (co-supervised), PhD in Geophysics at China University of Petroleum (Beijing)
  Deep learning for reservoir characterization 2017-2020

Master supervision

- Sabrina Reichert (co-supervised), MSc in Geophysics at The University of Texas at Austin
  Deep learning for Salt Segmentation 2023-2028
- Yang Cui (co-supervised), MSc in Geophysics at King Fahd University of Petroleum and Minerals (KFUPM)
  Fourier neural operator for seismic monitoring and imaging 2023-2025
- Quan Zhang (supervised), MSc in Geophysics at Zhejiang University
  High-resolution Radon transform in deep earth seismic imaging 2019-2022
- Mahmoud Shirazi (co-supervised), MSc in Geophysics at Shahrood University of Technology
  Application of Empirical Wavelet Transform in Reflection Seismic Data Processing and Interpretation 2015-2017
- Dong Zhang (co-supervised), MSc in Geophysics at China University of Petroleum (Beijing)
  Seismic data regularization and reconstruction with multiple constraints 2014-2017
- Shuwei Gan (co-supervised), MSc in Geophysics at China University of Petroleum (Beijing)
  Compressive sensing for efficient seismic acquisition and data reconstruction 2014-2017
- Shaohuan Zu (co-supervised), MSc in Geophysics at China University of Petroleum (Beijing)
  Deblending using curvelet transform in simultaneous-source acquisition with periodical shot scheduling 2013-2016
- Weilin Huang (co-supervised), MSc in Geophysics at China University of Petroleum (Beijing)
  Seismic noise attenuation using damped multichannel singular spectrum analysis 2012-2015

Undergraduate supervision

- Aldiyar Akhatuly (supervised), visiting undergraduate (intern) at The University of Texas at Austin
  Deep Learning for InSAR and induced seismicity in West Texas 2026
- Ashwin Ram (supervised), undergraduate at The University of Texas at Austin *AI for earthquake prediction* 2024
- Wenjie Lv (supervised), undergraduate at China University of Mining and Technology *Diffusion model for seismic applications* since 2024
- Jiachen Hu (supervised), visiting undergraduate (intern) at The University of Texas at Austin
  Deep learning for focal mechanism inversion 2024
- Constantinos Skevofilax (supervised), undergraduate at The University of Texas at Austin
  Earthquake forecasting using AI 2023-2024
- Matan Lebovits (co-supervised), undergraduate at The University of Texas at Austin
  Earthquake detection using AI and time-frequency analysis 2022

- Liuwei Xu (supervised), undergraduate at Zhejiang University
  Crustal structure imaging in West Canada 2018-2020

PRESENTATIONS AND LECTURES

1. Controllable deep learning for Production-Ready Seismic Processing and Imaging, May 19, 2026, Houston, SEG Advancing Data Analytics & ML Workshop, PC-based oral.
2. Never give up your dream in research, March 29, 2026, Houston, University of Houston, SEG student chapter, PC-based oral.
3. Demystifying the black box of AI seismology, March 6, 2026, Lubbock, Texas Tech University, PC-based oral.
4. Putting AI-based passive seismic monitoring from infancy into production, January 22, 2026, Austin, Shell London Center, Remote Presentation.
5. Key factors in revolutionizing passive seismic monitoring using AI and lessons to share with early-career scientists, November 24, 2025, Austin, SEG Early Career Technology Community Webinar Series, Remote Presentation.
6. Optimizing AI-Backed Earthquake Monitoring in Texas, August 1, 2025, Austin, ARMA TCIS Webinar Series, Remote Presentation.
7. A decade-long journey in revolutionizing passive seismic monitoring, April 25, 2025, Dallas, Southern Methodist University, PC-based oral.
8. Key factors in making a revolutionary change in passive seismic monitoring using AI, April 23, 2025, Austin, Geophysical Society of Houston (GSH), Remote Presentation.
9. Advanced Deep Learning for Distinguishing the Quarry Blasts from Induced Seismicity, April, 15, 2025, Baltimore, SSA annual meeting, PC-based oral.
10. Deep Learning for Distributed Acoustic Sensing Data Compression, April, 15, 2025, Baltimore, SSA annual meeting, PC-based oral.
11. Benchmark Dataset and Framework Accelerate Seismic AI Research, March 6, 2025, Fort Worth, Society for Industrial and Applied Mathematics Conference on Computational Science and Engineering, PC-based oral.
12. AI for seismology: How to Make it Work for Daily Operation and Better Science, Feb 13, 2025, Austin, Jackson School of Geosciences Deford Lecture, PC-based oral.
13. A decade-long journey in revolutionizing passive seismic monitoring, Jan 23, 2025, Austin, EAGE LC Netherlands, Remote Presentation.
14. A benchmark dataset for earthquake forecasting using AI, Dec 11, 2024, Washington D.C., AGU Fall meeting, Poster.
15. Developing a 3D S-Wave Velocity Model to Enhance Earthquake Relocation in the Permian Basin, Dec 13, 2024, Washington D.C., AGU Fall meeting, Poster.
16. DASBench: Benchmarked DAS data processing, Dec 10, 2024, Washington D.C., AGU Fall meeting, Poster.
17. Fine-tuning a first-motion-polarity picker using only two thousand regional measurements, Dec 9, 2024, Washington D.C., AGU Fall meeting, PC-based oral.
18. A journey to put AI in production for real-time earthquake monitoring, October 15, 2024, Austin, Bureau of Economic Geology Seminar, PC-based oral.
19. High-Resolution Mantle Transition Zone Imaging Using Multi-Dimensional Reconstruction of SS Precursors, October 23, 2024, Austin, Jackson School of Geosciences Lithosphere and Deep Earth Seminar, PC-based oral.

20. Deep learning for advanced DAS data processing and compression, Aug 30, 2024, Houston, IMAGE, PC-based oral.
21. Massive focal mechanism solutions from deep learning in West Texas, Aug 29, 2024, Houston, IMAGE, PC-based oral.
22. Pushing the limit of 5D interpolation using deep learning, Aug 28, 2024, Houston, IMAGE, PC-based oral.
23. Tuning a passive-seismic phase picker using TXED, June 11, 2024, Oslo, EAGE, PC-based oral.
24. Minimizing the Signal Leakage in DAS Data Processing Using SigRecover, June 11, 2024, Oslo, EAGE, PC-based oral.
25. Real-Time Earthquake Forecasting in China Using AI, May 26, 2024, Chiba, Japan Geoscience Union, PC-based oral.
26. An Ai-Assisted Real-Time Earthquake Forecasting Case Study in China, May 1, 2024, Anchorage, Seismological Society of America, PC-based Oral.
27. Deep learning for DAS denoising, Mar, 09, 2024, Houston, BP America, PC-based oral.
28. Benchmark dataset and framework accelerate research, Mar, 12, 2024, Houston, Saudi Aramco, PC-based oral.
29. A Texas earthquake dataset for seismological artificial intelligence, Dec, 15, 2023, San Francisco, AGU Fall meeting, PC-based oral.
30. AI-based fully automatic earthquake detection, magnitude estimation, data processing, and location, July, 16, 2023, Pasadena, IGARSS 2023, PC-based oral.
31. Deep learning for denoising distributed acoustic sensing data, July, 16, 2023, Pasadena, IGARSS 2023, PC-based oral.
32. Detecting an Enormous Number of Small-Magnitude Earthquakes Using EQCCT, April, 21, 2023, Puerto Rico, SSA annual meeting, PC-based oral.
33. Pyseistr: a python package for structural denoising and interpolation of multi-channel seismic data, Dec, 15, 2022, Chicago, AGU Fall meeting, PC-based oral.
34. Earthquake detection and P/S phase picking using the Compact Convolutional Transformer (EQCCT), Dec, 07, 2022, Austin, TexNet/CISR annual review meeting, PC-based oral.
35. Denoising of distributed acoustic sensing data, Dec, 07, 2022, Austin, TexNet/CISR annual review meeting, PC-based oral.
36. RFloc3D: a machine learning method for 3D microseismic source location using P- and S-wave arrivals, Dec, 07, 2022, Austin, TexNet/CISR annual review meeting, PC-based oral.
37. DAS denoising and array-based earthquake detection, June, 14, 2021, Austin, TexNet seismological meeting, PC-based oral.
38. Pyekfmm: a python package for 3D fast-marching-based traveltime calculation and its applications in seismology, June, 14, 2021, Austin, TexNet seismological meeting, PC-based oral.
39. Passive seismic monitoring, Nov, 07, 2021, Austin, TCCS sponsor meeting, PC-based oral.
40. AI-based advanced earthquake denoising, detection, magnitude estimation, location, and prediction, July, 20, 2021, Austin, TexNet seismological meeting, PC-based oral.
41. AI-based automatic earthquake localization, Dec, 07, 2021, Austin, TexNet/CISR annual review meeting, PC-based oral.

42. AI-based earthquake data denoising, detection, and magnitude estimation, Dec, 07, 2021, Austin, TexNet/CISR annual review meeting, PC-based oral.
43. Bridging the gap between exploration and earthquake seismology, Mar, 2, 2021, Austin, The University of Texas at Austin, PC-based oral.
44. SCALODEEP: A highly generalized deep learning framework for real-time earthquake detection, Dec, 2, 2020, Austin, TexNet Annual Review Meeting, The University of Texas at Austin, PC-based oral.
45. Local signal-and-noise orthogonalization, Jul 27, 2018, Wuhan, Institute of Geodesy and Geophysics, PC-based oral.
46. Simultaneous-source seismic exploration, Jul 20, 2018, Shandong University, PC-based oral.
47. Latest advances of the simultaneous-source seismic exploration technique, May 18, 2018, Tongji University, PC-based oral.
48. Fully automatic time-window selection using machine learning for global adjoint tomography, Dec 14, 2017, New Orleans, AGU Fall meeting, PC-based oral.
49. Automated time-window selection based on machine learning for full-waveform inversion, Sep 25, 2017, Houston, 86th Annual International Meeting, Society of Exploration Geophysicists (SEG), PC-based oral.
50. Intelligent global full waveform inversion based on machine learning, July, 3, 2017, Beijing, China University of Petroleum (Beijing), PC-based oral.
51. An overview of the latest development, challenges, and road head in simultaneous-source seismic exploration, June, 29, 2017, Wuhan, Institute of Geodesy and Geophysics, PC-based oral.
52. New advances in simultaneous-source seismic exploration, June, 22, 2017, Hangzhou, Zhejiang University, PC-based oral.
53. Machine learning based intelligent earthquake data processing for global adjoint tomography, April, 17, 2017, Princeton, Princeton University, PC-based oral.
54. Local signal-and-noise orthogonalization and its applications in seismic imaging, Jan, 30, 2017, East Lansing, Michigan State University, PC-based oral.
55. Geological structure guided well log interpolation for high-fidelity full waveform inversion, Oct, 19, 2016, Dallas, 86th Annual International Meeting, Society of Exploration Geophysicists (SEG), PC-based oral.
56. Damped rank-reduction method for simultaneous denoising and reconstruction of 5D seismic data, Oct, 19, 2016, Dallas, 86th Annual International Meeting, Society of Exploration Geophysicists (SEG), PC-based oral.
57. Preserving the discontinuities in least-squares reverse time migration of simultaneous-source data, Oct, 19, 2016, Dallas, 86th Annual International Meeting, Society of Exploration Geophysicists (SEG), PC-based oral.
58. Multi-dimensional seismic data reconstruction with multiple constraints, Oct, 19, 2016, Dallas, 86th Annual International Meeting, Society of Exploration Geophysicists (SEG), PC-based oral.
59. Fast dictionary learning for multidimensional seismic denoising via sequential generalized K-means, Oct, 19, 2016, Dallas, 86th Annual International Meeting, Society of Exploration Geophysicists (SEG), E-poster.
60. Well-log interpolated model for high-fidelity full waveform inversion, Jun, 16, 2016, Princeton, Princeton University, PC-based oral.

61. Noise attenuation using local signal-and-noise orthogonalization, Mar, 9, 2016, Houston, Saudi Aramco Research Center, PC-based oral.
62. FWI in the future: geological structure guided well log interpolation for high-fidelity full waveform inversion, Jan, 11, 2016, Knoxville, Oak Ridge National Laboratory, PC-based oral.
63. New advances in simultaneous-source seismic acquisition, Dec 16, 2015, San Francisco, AGU Fall meeting, PC-based oral.
64. Noise attenuation from simultaneous sources, Oct 26, 2015, Austin, USA, 10th biannual research meeting, Texas Consortium for Computational Seismology (TCCS), PC-based oral.
65. Delineating karstification using synchrosqueezeing wavelet transform, Oct 22, 2015, New Orleans, USA, 85th Annual International Meeting, Society of Exploration Geophysicists (SEG), PC-based oral.
66. Ground rolls attenuation using bandlimited signal-and-noise orthogonalization - the OZ-25 dataset case study, Oct 21, 2015, New Orleans, USA, 85th Annual International Meeting, Society of Exploration Geophysicists (SEG), E-poster.
67. Ground rolls attenuation using non-stationary matching filtering, Oct 21, 2015, New Orleans, USA, 85th Annual International Meeting, Society of Exploration Geophysicists (SEG), E-poster.
68. Characterization method of tight Dolomitic reservoir of Fengcheng formation in the west slope of Mahu sag, Junggar basin, China, Oct 21, 2015, New Orleans, USA, 85th Annual International Meeting, Society of Exploration Geophysicists (SEG), E-poster.
69. Empirical mode decomposition based smoothing in the flattened domain, Oct 21, 2015, New Orleans, USA, 85th Annual International Meeting, Society of Exploration Geophysicists (SEG), poster.
70. Deblending using a combined PNMO-MF-FK coherency filter, Oct 21, 2015, New Orleans, USA, 85th Annual International Meeting, Society of Exploration Geophysicists (SEG), poster.
71. Deblending by iterative orthogonalization and seislet thresholding, Oct 20, 2015, New Orleans, USA, 85th Annual International Meeting, Society of Exploration Geophysicists (SEG), PC-based oral.
72. Damped multichannel singular spectrum analysis for 3D random noise attenuation, Oct 20, 2015, New Orleans, USA, 85th Annual International Meeting, Society of Exploration Geophysicists (SEG), PC-based oral.
73. Application of similarity-weighted stacking to poststack quality factor estimation, Oct 20, 2015, New Orleans, USA, 85th Annual International Meeting, Society of Exploration Geophysicists (SEG), PC-based oral.
74. EMD-seislet transform, Oct 20, 2015, New Orleans, USA, 85th Annual International Meeting, Society of Exploration Geophysicists (SEG), poster.
75. Double sparsity seislet decomposition, Mar 23, 2015, Houston, USA, 9th biannual research meeting, Texas Consortium for Computational Seismology (TCCS), PC-based oral.
76. Velocity analysis using local similarity, Mar 23, 2015, Houston, USA, 9th biannual research meeting, Texas Consortium for Computational Seismology (TCCS), PC-based oral.
77. Noise attenuation using local orthogonalization, Nov 3, 2014, Austin, USA, 8th biannual research meeting, Texas Consortium for Computational Seismology (TCCS), PC-based oral.
78. Velocity analysis using similarity-weighted semblance, Oct 30, 2014, Denver, USA, 84th Annual International Meeting, Society of Exploration Geophysicists (SEG), E-poster.

79. Random noise attenuation by a selective hybrid approach using f-x empirical mode decomposition, Oct 29, 2014, Denver, USA, 84th Annual International Meeting, Society of Exploration Geophysicists (SEG), E-poster.
80. Random noise attenuation using local signal-and-noise orthogonalization, Oct 29, 2014, Denver, USA, 84th Annual International Meeting, Society of Exploration Geophysicists (SEG), E-poster.
81. Time-frequency analysis of seismic data using synchrosqueezing wavelet transform, Oct 28, 2014, Denver, USA, 84th Annual International Meeting, Society of Exploration Geophysicists (SEG), E-poster.
82. Deblending using a space-varying median filter, Oct 28, 2014, Denver, USA, 84th Annual International Meeting, Society of Exploration Geophysicists (SEG), PC-based oral.
83. Shot separation for towed streamer acquisition, Aug 7, 2014, R&D group of upstream technology, BP America, USA, PC-based oral.
84. Deblending of simultaneous-source data, Jun 7, 2014, R&D group of upstream technology, BP America, USA, PC-based oral.
85. Random noise attenuation using local similarity, Apr 11, 2014, Annual Industry Day, Austin, USA, Beaura of Economic Geology (BEG), poster.
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