Jiaxin Yu

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Education

Visting Student Researcher, Stanford University 2023
Doerr School of Sustainability, Department of Energy Science & Engineering

Ph.D. in Geophysics, Norwegian University of Science and Technology 2020-2023
Faculty of Engineering, Department of Geosciences & Petroleum
- Dissertation submitted in August, 2023

M.Sc. in Applied Geosciences, RWTH Aachen University, Germany 2017-2020
Insitute of Computational Geoscience & Reservoir Engineering
- Overall Mark: Sehr Gut (Very Good); Master Thesis 1.0 (Highest)

B.Sc. in Geology, China University of Petroleum, Qingdao, China 2013-2017
School of Geosciences
- Outstanding Undergraduate Thesis Award

Teaching and relevant Experience

Teaching Assistant, RWTH Aachen University 3/2020 – 8/2020
- Numerical Reservoir Modeling (NRE 1)
- NRE Python Exercise (Master level)

Student Hiwi, RWTH Aachen University 12/2018 – 3/2020
- Machine Learning Training Set building for Virtual Microscopy (ERS Prep Fund Projects: "Simulation and Data Science (SDS)")
- Big Data Management and PetroScan Viewer Development in Python

Awards, Honor, and Scholarships

- 2023 SSRN's All Time Top Ten download Papers for Environmental Physics eJournal
- 2023 Overseas Research Grant from The Research Council of Norway
- 2022 Equinor Publication Fund
- 2017 Outstanding Undergraduate Thesis Award
- 2016 Wining Award Fourth National Geological Skills Competition of College Students, Geological Society of China

Professional Services

Reviewer of American Mineralogist, Mineralogical Society of America (MSA)

Memberships

Society of Exploration Geophysicists (SEG)
European Association of Geoscientists and Engineers (EAGE)
International Association of Rock Physicists (IARP)
European Geosciences Union (EGU)
International Association for Mathematical Geosciences (IAMG)
SEG Student Chapter NTNU, Trondheim

Languages

Native: Chinese

Fluent: English

Conversational: German (C1), Norwegian (B2)

Professional Publications: Journals

Yu, J., Duffaut, K. and Avseth, P., 2023. "Understanding the synergistic impact of stress release and cementation on sandstone using sound waves — Implications for exhumation estimation" ***Geophysics***, 88, 6, pp.1-87.

Yu, J., Duffaut, K. and Avseth, P., 2023. "Stress sensitivity of elastic moduli in high-porosity cemented sandstone — Heuristic models and experimental data" ***Geophysics***, 88, 4, pp. MR185 - MR194.

Yu, J., Wellmann, F., Virgo, S., von Domarus, M., Jiang, M., Schmatz, J. and Leibe, B., 2023. "Superpixel segmentations for thin sections: Evaluation of methods to enable the generation of machine learning training data sets". ***Computers & Geosciences***, 170, p.105232.

Yu, J., Mukerji, T. and Avseth, P., 2023. "Rockphypy: An Extensive Python Library for Rock Physics Modeling". Accepted by ***SoftwareX***, Available at SSRN: http://dx.doi.org/10.2139/ssrn.4486364

Tian, Y., Stovas, A., Gao, J., Xu, W. and **Yu, J.**, 2023. "Tight sandstone gas reservoir characterization via amplitude-versus-offset attributes". ***Geophysical Prospecting***, 71, 6, pp.1030-1046.

Professional Publications: Manuscript to be submitted

Yu, J., Avseth, P., Mukerji, T., and Duffaut, K. "Effects of overconsolidation and stress release on seismic rock physics: A comparative study between unconsolidated sands and weakly cemented sandstone, to be submitted to ***Geophysics***.

Yu, J., Avseth, P., Holt, M. and Stovas, A. "Stress dependent anisotropy in Norwegian offshore, to be submitted to ***Geophysics***.

Professional Publications: International Conferences

Yu, J., Mukerji, T. and Avseth, P., 2023. "Open source Python Library for Rock Physics Modeling". Lofotseminaret 2023 in Applied Geophysics, Nyvågar, Kabelvåg, Norway, *Oral presentation.*

Yu, J., Duffaut, K. and Avseth, P., 2022. "Rock Physics Modeling of Geomechanical and Saturation Effect Caused by CO_2 Injection. 83rd EAGE Annual Conference & Exhibition, Vol. 2022, No. 1, pp. 1-5. *Oral presentation.*

Yu, J., Duffaut, K. and Avseth, P., 2022, Rock physics modeling of increasing stress sensitivity in weakly to moderately cemented sandstone upon stress release, 6th International Workshop on Rock Physics, Book of abstract, pp. 49. *Oral presentation.*

Yu, J., Mukerji, T. and Avseth, P., 2022. "Rock Physics Modeling of CCS induced effective stress release". Lofotseminaret, 2022, Nyvågar, Kabelvåg, Norway, *Oral presentation.*

Tian, Y., Stovas, A., Gao, J., **Yu, J.**, and Li, M., 2022, June. Gas saturation characterization of tight sandstone via AVO attributes. 83rd EAGE Annual Conference & Exhibition Vol. 2022, No. 1, pp. 1-5.

Yu, J., Duffaut, K. and Avseth, P., 2021."Rock Physics Modeling for Stress Release in Cemented Sandstone." First EAGE Rock Physics Workshop in Latin America, vol. 2021, no. 1, pp. 1-5. *Oral presentation.*

Yu, J., Schmatz, J., von Domarus, M., Jiang, M., Virgo, S., Leibe, B. and Wellmann, J.F., 2020. "Generating a pixel-wise annotated training dataset to train ML algorithms for mineral identification in rock thin sections". 22nd EGU General Assembly, Vol. 2020, pp. 18865. *Oral presentation.*

References

Name	Employer	Title	Phone	Email
Reference Person (*)	Employer Name Here	Dr.	123-456-7890	professional@reference.com
Other Reference	Other Employer Name Here	Ms.	987-654-3210	personal@reference.com

(*) Indicates professional reference

Additional Information

Enter job-related honors, awards, leadership activities, skills (such as computer software proficiency or typing speed) or any other information requested by a specific job announcement.