

Gege Wen
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EDUCATION

- Doctor of Philosophy in Energy Resource Engineering** 2018 – Present
School of Earth, Energy & Environmental Science | Stanford University, United States
Advisor: Sally M. Benson
Committee member: Hamdi Tchelepi, Louis Durlofsky
- Master of Science in Environmental Fluid Mechanics and Hydrology** 2016 – 2017
Civil and Environmental Engineering | Stanford University, United States
Advisor: Peter K. Kitanidis
- Bachelor of Applied Science and Engineering** 2011 – 2016
Lassonde Mineral Engineering | University of Toronto, Canada
Engineering Business Minor, Graduate with Honour

PAPER

- Wen, G., & Benson, S.** *CO₂ plume migration and dissolution in layered reservoirs*. International Journal of Greenhouse Gas Control (2019) doi: 10.1016/j.ijggc.2019.05.012
- Wen, G., Tang, M., Benson, S.** *Multiphase flow prediction with deep neural networks*. (Under review) Preprint: <https://arxiv.org/abs/1910.09657>
- Jin, L., Lu, H., and **Wen, G.** *Fast uncertainty quantification of reservoir simulation with variational U-Net* (Preparing submission)
Preprint: <https://arxiv.org/abs/1907.00718>

EXPERIENCE

- Benson Lab Graduate Student Researcher** | Stanford University, United States 2017 – Present
- Research focus: CO₂-water multiphase flow process in the context of CO₂ geological storage; using deep learning to achieve fast predictions of multiphase flow numerical simulation results; plume migration probability assessment for offshore carbon capture and storage investigations the Gulf coast
- Teaching Assistant** | Stanford University, United States 2019
- ENERGY 153/253: Carbon Capture and Sequestration; designed and instructed a lecture on the numerical simulation of CO₂ plume migration in geological formation
- Engineering Co-op Student** | Husky Energy Inc., Canada 2014 – 2015
- Managed water-flooding projects in the north Alberta heavy oil and gas production
- Engineering Intern** | China Minmetals Non-Ferrous Metals Co. Ltd, China *Summer 2013*
- Reviewed the environmental impact study for the Glencore Xstrata Las Bambas Copper Mine bidding project

POSTER

- Predicting CO₂ plume migration using Deep Neural Networks Long Beach, United States | 2019
ICML Workshop. Climate Change: How Can AI Help?
- Fast Uncertainty Quantification of reservoir simulation with variational U-Net Stanford University, United States | 2019
CS231N: Convolutional Neural Networks for Visual Recognition. **Best Project Award**.
- CO₂ Plume Simulation with Deep Neural Networks Stanford University, United States | 2018
CS230: Deep Learning. **Best Poster Award**.

HONOR

- ExxonMobil Emerging Energy Fellow** | Stanford University, United States 2019
- Grads to Watch** | University of Toronto, Canada 2016
- Dean's List Scholar** | University of Toronto, Canada 2013 – 2015
- Lassonde Scholarship** | University of Toronto, Canada 2013 – 2014