Stanford

Zhenlin Chen

Ph.D. Student in Energy Science and Engineering, admitted Summer 2023

Bio

BIO

Zhenlin (Richard) Chen is a Ph.D. candidate at Stanford's Adam Brandt lab, focuses on greenhouse gas emissions from oil and gas. His work primarily revolves around evaluating ground sensor technologies for methane detection and quantification ability. His methodological approach blends engineering principles, field data collection, and applied statistics. Chen is exploring AI-driven frameworks, particularly large language models, to refine energy data extraction and enhance the OPGEE model through private data fine-tuning and reinforcement learning. His emphasis remains on domain-specific tasks, aiming for efficiency in terms of latency and cost. He pursued his undergraduate studies in environmental science at Cornell University and holds a master's in Atmosphere and Energy Engineering from Stanford.

EDUCATION AND CERTIFICATIONS

- Master of Engineering, Stanford University , Atmosphere and Energy
- Master of Science, Cornell University , Information and Data Science
- Bachelor of Science, Cornell University , Environmental Science

Publications

PUBLICATIONS

- **Technological Maturity of Aircraft-Based Methane Sensing for Greenhouse Gas Mitigation.** *Environmental science & technology*
  El Abbadi, S. H., Chen, Z., Burdeau, P. M., Rutherford, J. S., Chen, Y., Zhang, Z., Sherwin, E. D., Brandt, A. R.
  2024
- **Evaluating the Sustainable Development Goals within Spatial Planning for Decision-Making: A Major Function-Oriented Zone Planning Strategy in China** *LAND*
  Fu, H., Liu, J., Dong, X., Chen, Z., He, M.
  2024; 13 (3)