Meng Jia — Resume

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EDUCATION

- **Ph.D in Statistics** — **Golden, CO**
  Colorado School of Mines — *Start in January 2021*
- **M.S. in Data Science** — **Golden, CO**
  Colorado School of Mines — *August 2019 – December 2020*
- **M.S. in Geology** — **Gainesville, FL**
  University of Florida — *August 2015 – June 2018*
- **B.S. & M.S. in Geophysics** — **Beijing, China**
  Peking University — *September 2008 – June 2015*

RESEARCH EXPERIENCE

- **Research Assistant** — **Golden, CO**
  Department of Applied Math and Statistics, Colorado School of Mines — *January 2021 – January 2023*
  Methane emission localization and quantification on Oil and Gas facilities
  - Developed an effective framework for methane emission detection, localization, and quantification in near real-time.
  - Implemented the Gaussian puff model using TensorFlow, resulting in a computationally efficient solution for near real-time methane monitoring.
  - Conducted data analysis and prepared reports on methane monitoring to drive business decisions for Cheniere Energy, the largest LNG producer in the U.S.

- **Research Assistant** — **Gainesville, FL**
  Department of Geological Sciences, University of Florida — *August 2015 – June 2018*
  Inferred Martian interior structures in Bayesian framework
  - Applied a reversible jump Markov chain Monte Carlo (MCMC) algorithm in the trans-dimensional hierarchical Bayesian framework to invert Mars interior structures from surface seismic observations
  - Participated as a researcher in the NASA InSight project - the first Mars seismology study in human history
  - Conducted data collection and preprocessing in Linux and performed parallel computation using HPC

WORK EXPERIENCE

- **Data Science Intern** — **Houston, TX**
  Geophysics Technology Center, Schlumberger — *May - August 2021*
  Well logs interpolation and uncertainty quantification using deep learning methods
  - Utilized attentive neural processes which combines neural networks and stochastic processings for predictions and uncertainty quantification
  - Implemented attention mechanism to improve prediction accuracy
  - Built up the deep learning model in TensorFlow and performed computing in GPU environment set up in Google Cloud Platform

SKILLS

- **Data Science Software Skills:** machine learning (Tensorflow, PyTorch), data processing (Scikit-learn, SciPy), data management (Pandas, MySQL), data visualization (Matplotlib, Seaborn)
- **General Software Skills:** Python, R, Matlab, C/C++, Linux Shell script, SQL, Slurm, Git, Latex
- **Soft Skills:** quick learning, multitasking, creative thinking and collaboration.