

Postconvention Workshop

W-7: Machine Learning Applications for FWI and Seismic Imaging

Call for Abstracts

Machine learning (ML) has been successfully used for some time in seismic interpretation and more recently in seismic data processing. In this half-day postconvention workshop, we will focus on “*Machine Learning Applications for FWI and Seismic Imaging*”. We would like to examine a few case studies, understand the benefits and limitations of ML in velocity model building and imaging, and discuss the path forward.

We will highlight and encourage submissions including, though not limited to, the following topics:

- more efficient wave propagators,
- more accurate P/S-wave separation,
- enhanced imaging resolution and signal-to-noise ratio,
- methods to overcome cycle-skipping,
- and robust ways to incorporate deep learning for inversion.

We would like to invite you to present your work at this workshop. We anticipate these improvements will have a significant impact on velocity model building accuracy and seismic imaging quality.

You can submit a title and an abstract (<= 300 words preferred) to describe your work using the following link by April 15, 2022. Accepted speaker will have the option to submit an expanded abstract by June 15, 2022.

Link to submission: <https://forms.gle/nT9cLMGTFkkQxpx8>

Please feel free to contact us (yong.ma@aramcoamericas.com) if you have any questions.

Organizing Committee:

Weichang Li, Aramco Americas, weichang.li@aramcoamericas.com

Xiaolei Song, BP, xiaolei.song@bp.com

Yunyue (Elita) Li, Purdue University, li4017@purdue.edu

Yong Ma, Aramco Americas, yong.ma@aramcoamericas.com

Sean Crawley, PGS, sean.crawley@pgs.com