60: The power and limitations of machine learning and data

SEG's Seismic Soundoff

In this episode, host Andrew Geary speaks with Simon Shaw and Arvind Sharma on July's The Leading Edge that highlights machine learning applications. Simon and Arvind discuss what problems machine learning successfully solves, the requirements and limitations of machine learning, what the next five years hold for the topic, and more. Visit https://seg.org/podcast for links to July's special section. Interviewee biographies Dr. Arvind Sharma is VP of Data and Analytics at TGS. In this role, he is responsible for Machine Learning initiatives as well as broader Digital transformation. He has over 10 years of experience in various E&P and software related work. Arvind has bachelors and masters degrees in Applied Geology and Exploration Geophysics, respectively from the Indian Institute of Technology (IIT) Kharagpur. He has a Ph.D. from Virginia Tech in Geophysics. Simon Shaw, Principal Geophysicist for ConocoPhillips Company, has more than 20 years' experience in seismic data processing and geophysical research. He is currently responsible for QA/QC of 3D and 4D seismic imaging projects, and technology development involving the use of machine learning to solve subsurface problems. He holds a B.Eng. Mechanical Engineering from Imperial College, London (1994), M.S. Applied Ocean Science from the University of Delaware (1997) and a Ph.D. in Geophysics from the University of Houston (2005). Simon received the J. Clarence Karcher Award from the SEG in 2005 for his research into depth imaging using inverse scattering. Editor's note: Due to Dr. Arvind Sharma's recording location, he is hard to understand at times. Please continue to listen as his contributions to this discussion are invaluable. Credits Interview: Simon Shaw, Arvind Sharma Original music by Zach Bridges. This episode was hosted, edited, and produced by Andrew Geary. Special thanks to the SEG podcast team: Jennifer Crockett, Ally McGinnis, and Mick Swiney. If you enjoy the show, please subscribe to the podcast on Spotify, Google Podcasts, or Apple Podcasts to be the first to know about new episodes!