



Geophysical Society of Pittsburgh



*Proudly Presents Tuesday, September 15, 2020
Zoom meeting*

Machine Learning and Deep Learning: Fundamentals and workflow quality assessment with some examples.

Dr. William Harbert, University of Pittsburgh

Bill will give a deep dive into Machine Learning (ML) and Deep Learning (DL), technologies that are changing the world. The goal of the presentation is to allow the participant to understand the background, concepts, and workflows of DL and ML. These technologies have a fascinating history that can be traced back to the 1940's and now have been fused with revolutions in computational hardware, software, networks and cloud technologies. In DL and ML the sum of these advances is much larger than their individual parts. Selected examples will be shown to highlight the impact of DL and ML in the E&P space.

Dr. William Harbert is a Professor of Geophysics at the Department of Geology and Environmental Sciences. His work relies on theory combined with field measurements and have included DL methods to estimate per stage gas productivity from microseismic and wireline log attributes. He holds a B.S. degrees in Geophysics, Mathematics and Geology from Western Washington University. He completed a M.S. in Exploration Geophysics and Ph.D. in Geophysics from Stanford University and was a National Research Council Post-doc in Menlo Park CA. He is applying DL and ML workflows to classification, attribute prediction and object detection.

*Please RSVP using the PayPal link on the Geophysical Society of Pittsburgh website at: www.thegsp.org
Cost: Free for GSP Members, \$10 Non-members (\$10 for Students)*

Tuesday September 15, 2020

Agenda:

11:50 AM Zoom meeting opens

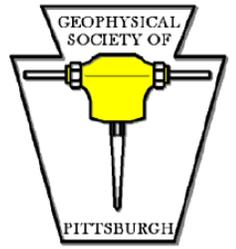
12:00 Noon Joel Starr will begin the meeting

12:15 Lecture begins

To receive a CEU certificate from this lecture please contact Bill Harbert



Sponsorship Opportunities



The Geophysical Society of Pittsburgh offers sponsorship opportunities. Our monthly meetings occur each first Tuesday of every month beginning in September through May.

Since our inception in 2010, meetings have been very well attended by industry professionals, averaging well over 50 attendees per meeting, peaking at more than 100 for our most highly attended meeting. Not only do our meetings offer exceptional technical presentations in the field of geophysics, but they provide an outstanding networking opportunity for oil and gas industry professionals working in the Appalachian basin.

Your generous donations will help in the following ways: 1) helping to bring in distinguished lecturers; 2) offsetting part of the cost of the monthly meeting venue; and 3) enabling a Scholarship Program for future Geophysicists to be awarded each year to an outstanding student enrolled in a Geophysics program at one of our local universities.

Your company logo will be boldly displayed during the social hour of each meeting on the front screen, as well as on all meeting announcements and on our website. We are offering corporate sponsorship opportunities at several levels this year, as well as opportunities to sponsor our social hour during the meeting. Please note that a secure payment link is now available on our website for your added enrollment convenience.

Please click [HERE](#) to download more information, then return to this page to enroll as a sponsor.



Geophysical Society of Pittsburgh

The Geophysical Society of Pittsburgh successfully hosted the first Appalachian Basin Geophysical Symposium (ABGS), June 5th 2021 at the Noah's Event Center, Canonsburg PA. The event was a huge success with great speakers covering the latest innovations in geophysical research, technology and perspectives of the Appalachian Basin. We thank all our generous sponsors, speakers and organizers who made this event possible.

The positive feedback received from our community has prompted the GSP board to make the ABGS an annual event. With the addition of this yearly symposium, *it was determined that the monthly meetings should be reduced to a quarterly basis.*

The goals of this change are twofold:

1. Boost attendance numbers at our general meetings;
2. Focus Appalachian Basin centric talks for the ABGS.

Two of the quarterly meetings will occur in the fall and the other two during the spring. The ABGS will still be held around the beginning of June in tandem with the golf outing. This ensures that our members still have the opportunity to network on a semiregular basis.

We hope these changes help enhance the GSP's ability to promote the science of geophysics as well as promote the fellowship and cooperation among its membership. We look forward to seeing everyone at the first meeting this September.

Sincerely,

The GSP Board

2020-2021 GSP OFFICERS

President: Joel Starr

Vice President: Jianli Yang

Treasurer: Brian Lipinski

Secretary: Bill Harbert

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Your Dues and Sponsorship in Geophysical Society of Pittsburgh go toward:

- *Outstanding Monthly Lecture Series*
- *SEG Distinguished Lecturers*
- *Annual Scholarship Awards*
- *Annual Golf Outing*
- *Short Courses*

*Please contact Joel Starr, Jianli Yang
, or Brian Lipinski for Sponsorship Opportunities.*
