

# A Live Webinar

## Machine Learning Applications in Seismic Exploration

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**September 9-12, 2024**

9:00 am - 1:00 pm CST

This Course promises to be the most comprehensive and yet tutorial that's available in this ever-expanding field.

### Course Outline:

Part 1: Introduction

Part 2: Linear regression

Part 3: Gradient descent

Part 4: Linear Classification

Part 5: The single-layer perceptron & the perceptron learning rule

Part 6: Multi-layer neural networks and back propagation

Part 7: Deep Learning

Part 8: Kernel regression & its application to seismic reservoir analysis

Part 9: Inversion versus Machine Learning

Part 10: Kernel classification and its application to seismic reservoir analysis

Part 11: Unsupervised Learning

Part 12: Convolution Neural Networks

Part 13: Other Machine Learning Methods

Conclusions and References

It is our intention to provide you with all the necessary tools to enable you to build an ML/AL program for your own use, a company need, or perhaps an application for a client. Later, we will provide a course in Python coding toward that goal. Stay tuned.

### Additional Learning Aids & Considerations

- ❖ All sessions **recorded** and available each day for review (in case you miss a session or more).
- ❖ Copies of all slides provided before the course.



**Major discounts available for groups and students**

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