Machine & Deep Learning for Geophysical Applications

Day 1

09:00-09:30	Program, Biography, Teams
09:30-10:00	Moodle, Weka, ChatGPT
10:00-10:15	*Refreshments*
10:15-10:45	Machine learning
10:45-11:15	Classification
11:15-12:00	Ex Lith Classification,
12:30-13:00	Unsupervised
13:00-14:00	*Lunch*
14:00-14:30	Clustering
14:30-15:00	Ex Lith Clustering
15:00-15:30	*Refreshments*
15:30-16:00	Attribute Selection
16:00-16:30	Quiz 1
16:30-17:00	Team A preparation

Day 2

09:00-09:30	Team A: Summary Day 1
09:30-10:00	Attribute Filters
10:00-10:15	*Refreshments*
10:15-10:45	Ex Attribute Filters
10:45-11:15	Artificiel Neural Nets
11:15-12:00	Ex Facies Classification,
12:30-13:00	Semi-supervised
13:00-14:00	*Lunch*
14:00-14:30	Deep Neural Nets
14:30-15:00	Ex Facies Clustering
15:00-15:30	*Refreshments*
15:30-16:00	Ensemble
16:00-16:30	Quiz 2
16:30-17:00	Team B preparation

Day 3

09:00-09:30	Team B: Summary Day 2
09:30-10:00	Ex Lith Ensemble
10:00-10:15	*Refreshments*
10:15-10:45	Regression
10:45-11:15	Ex Lith Ensemble,
11:15-12:00	Over & Underfitting
12:30-13:00	Ex Lith Regression
13:00-14:00	*Lunch*

14:00-14:30	Activation Functions
14:30-15:00	Deep Learning(DL)
15:00-15:30	*Refreshments*
15:30-16:00	Ex Lith DLClassification
16:00-16:30	Quiz 3
16:30-17:00	Team C preparation

Day 4

09:00-09:30	Team C: Summary Day 3
09:30-10:00	Use of ChatGPT for DL
10:00-10:15	*Refreshments*
10:15-10:45	Ex Lith DL Clustering
10:45-11:15	Support Vector Machine
11:15-12:00	Ex DL Lith SVM,
12:30-13:00	Hyper parameters
13:00-14:00	*Lunch*
14:00-14:30	Ex Training DL Networks
14:30-15:00	DL 4D Brazil
15:00-15:30	*Refreshments*
15:30-16:00	GAN vs CNN
16:00-16:30	Quiz 4
16:30-17:00	Team D preparation

Day 5

09:00-09:30	Team D: Summary Day 4
09:30-10:00	ML Models
10:00-10:15	*Refreshments*
10:15-10:45	Ex DL Facies_Merged Reload
10:45-11:15	You ain't seen nothing yet
11:15-12:00	Ex Sat-Segmentation_CNN
12:30-13:00	Boolean Logics
13:00-14:00	*Lunch*
14:00-14:30	VOI-Geothermal & CO2
14:30-15:00	Ex AI Inversion
15:00-15:30	*Refreshments*
15:30-16:00	Ex Salt-Segmentation_U-net
16:00-16:30	Quiz 5
16:30-17:00	ChatGPT: questions you never dared to ask