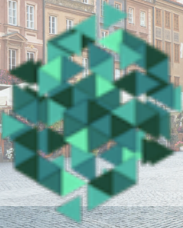# 3rd International Summer School on Deep Learning

DeepLearn 2019
Warsaw, Poland - July 22-26, 2019

Keynotes

Maria-Florina Balcan (Carnegie Mellon University), **Data Driven Clustering**
Mark Gales (University of Cambridge), **Use of Deep Learning in Non-native Spoken English Assessment**
Mihaela van der Schaar (University of Cambridge) **Learning Engines for Healthcare: Using Machine Learning to Transform Clinical Practice and Discovery**

Courses

- Aaron Courville (University of Montréal) [introductory/intermediate] **Deep Generative Models**

- Issam El Naqa (University of Michigan) [introductory/intermediate] **Deep Learning for Biomedicine**

- Sergei V. Gleyzer (University of Florida) [introductory/intermediate] **Feature Extraction, End-end Deep Learning and Applications to Very Large Scientific Data: Rare Signal Extraction, Uncertainty Estimation and Realtime Machine Learning Applications in Software and Hardware**

- Vasant Honavar (Pennsylvania State University) [introductory/intermediate] **Causal Models for Making Sense of Data**

- Qiang Ji (Rensselaer Polytechnic Institute), [introductory/intermediate] **Probabilistic Deep Learning for Computer Vision**

- James Kwok (Hong Kong University of Science and Technology) [introductory/intermediate] **Compressing Neural Networks**

- Tomas Mikolov (Facebook) [introductory] **Using Neural Networks for Modeling and Representing Natural Languages (with Piotr Bojanowski and Armand Joulin)**

- Hermann Ney (RWTH Aachen University) [intermediate/advanced] **Speech Recognition and Machine Translation: From Statistical Decision Theory to Machine Learning and Deep Neural Networks**

- Jose C. Principe (University of Florida) [intermediate/advanced] **Cognitive Architectures for Object Recognition in Video**

- Fabio Roli (University of Cagliari), [introductory/intermediate] **Adversarial Machine Learning**

- Björn Schuller (Imperial College London) [introductory/intermediate] **Deep Learning for Intelligent Signal Processing**

- Alex Smola (Amazon) [introductory] **Dive into Deep Learning**

- Sargur Srihari (University at Buffalo) [intermediate/advanced] **Explainable Artificial Intelligence**

- Ponnuthurai N Suganthan (Nanyang Technological University) [introductory/intermediate] **Learning Algorithms for Classification, Forecasting and Visual Tracking**

- Johan Suykens (KU Leuven) [introductory/intermediate] **Deep Learning, Neural Networks and Kernel Machines**

- Bertrand Thirion (INRIA) [introductory] **Understanding the Brain with Machine Learning**

- Gaël Varoquaux (INRIA) [intermediate] **Representation Learning in Limited Data Settings**

- René Vidal (Johns Hopkins University) [intermediate/advanced] **Mathematics of Deep Learning**

- Haixun Wang (WeWork) [intermediate] **Abstractions, Concepts, and Machine Learning**

- Xiaowei Xu (University of Arkansas, Little Rock) [introductory/advanced] **Multi-resolution Models for Learning Multilevel Abstract Representations of Text**

- Ming-Hsuan Yang (University of California, Merced) [intermediate/advanced] **Learning to Track Objects**

- Zhongfei Zhang (Binghamton University) [introductory/advanced] **Knowledge Discovery from Complex Data with Deep Learning**

Acknowledgments

More info: http://deeplearn2019.irdta.eu