

# DeepLearn 2022 Spring

## 5th INTERNATIONAL SCHOOL ON DEEP LEARNING

Guimarães, Portugal · April 18-22, 2022

### Keynotes



**Kate Smith-Miles**  
University of Melbourne  
Stress-testing Algorithms via Instance Space Analysis



**Mihai Surdeanu**  
University of Arizona  
Explainable Deep Learning for Natural Language Processing



**Zhongming Zhao**  
University of Texas, Houston  
Deep Learning Approaches for Predicting Virus-Host Interactions and Drug Response

### Courses



**Eneko Agirre**  
University of the Basque Country  
[introductory/intermediate] Natural Language Processing in the Pretrained Language Model Era



**Mohammed Bennamoun**  
University of Western Australia  
[intermediate/advanced] Deep Learning for 3D Vision



**Altan Çakır**  
Istanbul Technical University  
[introductory] Introduction to Deep Learning with Apache Spark



**Rylan Conway**  
Amazon  
[introductory/intermediate] Deep Learning for Digital Assistants



**Jianfeng Gao**  
Microsoft Research  
[introductory/intermediate] An Introduction to Conversational Information Retrieval



**Daniel George**  
JPMorgan Chase  
[introductory] An Introductory Course on Machine Learning and Deep Learning with Mathematica/Wolfram Language



**Bohyung Han**  
Seoul National University  
[introductory/intermediate] Robust Deep Learning



**Lina J. Karam**  
Lebanese American University  
[introductory/intermediate] Deep Learning for Quality Robust Visual Recognition



**Xiaoming Liu**  
Michigan State University  
[intermediate] Deep Learning for Trustworthy Biometrics



**Jennifer Ngadiuba**  
Fermi National Accelerator Laboratory  
[intermediate] Ultra Low-latency and Low-area Machine Learning Inference at the Edge



**Lucila Ohno-Machado**  
University of California, San Diego  
[introductory] Use of Predictive Models in Medicine and Biomedical Research



**Bhiksha Raj**  
Carnegie Mellon University  
[introductory] Quantum Computing and Neural Networks



**Bart ter Haar Romenij**  
Eindhoven University of Technology  
[intermediate] Deep Learning and Perceptual Grouping



**Kaushik Roy**  
Purdue University  
[intermediate] Re-engineering Computing with Neuro-inspired Learning: Algorithms, Architecture, and Devices



**Walid Saad**  
Virginia Polytechnic Institute and State University  
[intermediate/advanced] Machine Learning for Wireless Communications: Challenges and Opportunities



**Yvan Saeys**  
Ghent University  
[introductory/intermediate] Interpreting Machine Learning Models



**Martin Schultz**  
Jülich Research Centre  
[intermediate] Deep Learning for Air Quality, Weather and Climate



**Richa Singh**  
Indian Institute of Technology, Jodhpur  
[introductory/intermediate] Trusted AI



**Sofia Vallecorsa**  
European Organization for Nuclear Research  
[introductory/intermediate] Deep Generative Models for Science: Example Applications in Experimental Physics



**Michalis Vazirgiannis**  
École Polytechnique  
[intermediate/advanced] Machine Learning with Graphs and Applications



**Guowei Wei**  
Michigan State University  
[introductory/advanced] Integrating AI and Advanced Mathematics with Experimental Data for Forecasting Emerging SARS-CoV-2 Variants



**Xiaowei Xu**  
University of Arkansas, Little Rock  
[intermediate/advanced] Deep Learning for NLP and Causal Inference



**Guoying Zhao**  
University of Oulu  
[introductory/intermediate] Vision-based Emotion AI

More info: <https://irdta.eu/deeplearn/2022sp>



Algoritmi Center,  
University of Minho  
Guimarães



School of Engineering,  
University of Minho  
Guimarães



Intelligent Systems  
Associate Laboratory  
University of Minho



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