

# DeepLearn 2022 Winter

## 5th INTERNATIONAL SCHOOL ON DEEP LEARNING

Bournemouth, UK · January 17-21, 2022

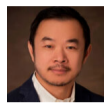
### Keynotes



**Yi Ma**  
**University of California, Berkeley**  
White-box Deep (Convolution) Networks from the Principle of Rate Reduction



**Daphna Weinshall**  
**Hebrew University of Jerusalem**  
Curriculum Learning in Deep Networks



**Eric P. Xing**  
**Carnegie Mellon University**  
It Is Time for Deep Learning to Understand Its Expense Bills

### Courses



**Peter L. Bartlett**  
**University of California, Berkeley**  
[intermediate/advanced] Deep Learning: A Statistical Viewpoint



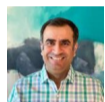
**Joachim M. Buhmann**  
**Swiss Federal Institute of Technology, Zürich**  
[introductory/advanced] Algorithm Validation for Data Science



**Nitesh Chawla**  
**University of Notre Dame**  
[introductory/intermediate] Graph Representation Learning



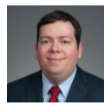
**Seungjin Choi**  
**BARO AI Academy**  
[introductory/intermediate] Bayesian Optimization over Continuous, Discrete, or Hybrid Spaces



**Sumit Chopra**  
**New York University**  
[intermediate] Deep Learning in Healthcare



**Rüdiger Dillmann**  
**Karlsruhe Institute of Technology**  
[introductory/intermediate] Building Brains for Robots



**Marco Duarte**  
**University of Massachusetts, Amherst**  
[introductory/intermediate] Explainable Machine Learning



**Charles Elkan**  
**University of California, San Diego**  
[intermediate] AI and ML Applications in Finance and Retail



**Rob Fergus**  
**New York University**  
[intermediate/advanced] Self-supervised Learning of Visual Representations for Recognition and Interaction



**João Gama**  
**University of Porto**  
[introductory] Learning from Data Streams: Challenges, Issues, and Opportunities



**Claus Horn**  
**Zurich University of Applied Sciences**  
[intermediate] Deep Learning for Biotechnology



**Nathalie Japkowicz**  
**American University**  
[intermediate/advanced] Learning from Class Imbalances



**Gregor Kasieczka**  
**University of Hamburg**  
[introductory/intermediate] Deep Learning Fundamental Physics: Rare Signals, Unsupervised Anomaly Detection, and Generative Models



**Karen Livescu**  
**Toyota Technological Institute at Chicago**  
[intermediate/advanced] Speech Processing: Automatic Speech Recognition and beyond



**David McAllester**  
**Toyota Technological Institute at Chicago**  
[intermediate/advanced] Information Theory for Deep Learning



**Dhableswar K. Panda**  
**Ohio State University**  
[intermediate] Exploiting High-performance Computing for Deep Learning: Why and How?



**Tomaso Poggio**  
**Massachusetts Institute of Technology**  
[advanced] Deep Learning: Theoretical Observations



**Fabio Roli**  
**University of Cagliari**  
[introductory/intermediate] Adversarial Machine Learning



**Jude W. Shavlik**  
**University of Wisconsin, Madison**  
[introductory/intermediate] Advising, Explaining, Distilling, and Quantizing Deep Neural Networks



**Kunal Talwar**  
**Apple**  
[introductory/intermediate] Foundations of Differentially Private Learning



**Tinne Tuytelaars**  
**KU Leuven**  
[introductory/intermediate] Continual Learning in Deep Neural Networks



**Lyle Ungar**  
**University of Pennsylvania**  
[intermediate] Natural Language Processing using Deep Learning



**Yu-Dong Zhang**  
**University of Leicester**  
[introductory/intermediate] Convolutional Neural Networks and Their Applications to COVID-19 Diagnosis

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



**Bournemouth University**  
Department of Computing and Informatics



**Institute for Research Development, Training and Advice (IRDTA)**  
Brussels/London