DeepLearn 2025

12th INTERNATIONAL SCHOOL ON DEEP LEARNING

(with a special focus on Large Language Models, Foundation Models and Generative AI)

Porto - Maia, Portugal · July 21-25, 2025

Keynote



Sergei V. Gleyzer
University of Alabama
Discovery Science through the Lens of Deep Learning

Courses



Pierre Baldi
University of California Irvine
[intermediate/advanced] From Deep Learning and Transformers to AI Risks and Safety



Sean Benson
Amsterdam University Medical Center
[intermediate] Digital Twins and Generative AI for Personalised Medicine



Xavier Bresson
National University of Singapore
[intermediate/advanced] Graph Transformers, Graph Generative Models and Large Language Models



Nello Cristianini
University of Bath
[introductory] Toward Ever More Clever Machines: The Evolution and Future of AI



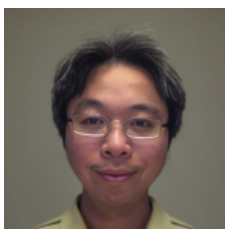
Mark Derdzinski
Dexcom
[introductory] From Prototype to Production: Evaluation Strategies for Agentic Applications



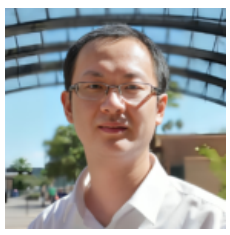
Samira Ebrahimi Kahou
University of Calgary
[intermediate/advanced] Explainability in Machine Learning



Elena Giusarma
Michigan Technological University
[introductory/intermediate] Machine Learning at the Frontier of Astrophysics: Simulating the Universe



Shih-Chieh Hsu
University of Washington
[intermediate/advanced] Real-Time Artificial Intelligence for Science and Engineering



Xia “Ben” Hu
Rice University
[introductory/advanced] Efficient LLM Serving: Algorithms and Systems



Lu Jiang
ByteDance & Carnegie Mellon University
[introductory/intermediate] Transformers for Image and Video Generation: Fundamentals, Design, and Innovations



Jayashree Kalpathy-Cramer
University of Colorado
[introductory/intermediate] Multimodal AI for Healthcare



Yingbin Liang
Ohio State University
[intermediate/advanced] Theory on Training Dynamics of Transformers



Chen Change Loy
Nanyang Technological University
[intermediate/advanced] Harnessing Prior for Content Enhancement and Creation



Fenglong Ma & Cao (Danica) Xiao
Pennsylvania State University & GE HealthCare
[introductory/intermediate] Transforming Healthcare and Drug Development through Multimodal AI with LLMs and Generative AI Technologies



Evan Shelhamer
DeepMind
[intermediate] Test-Time Adaptation for Updating on New and Different Data



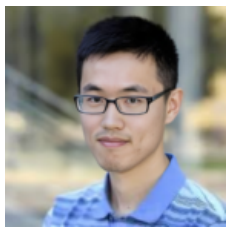
Atlas Wang
University of Texas Austin
[intermediate] Low Rank Strikes Back in the Era of Large Language Models

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Rex Ying
Yale University
[intermediate/advanced] Multimodal Foundation Models for Graph-Structured Data: Framework and Scientific Applications

More info: https://deeplearn.irdta.eu/2025

Universidade da Maia | **Universidade do Porto** | **Intelligent Systems Associate Laboratory** | **Artificial Intelligence and Computer Science Laboratory (LIACC)** | **Universitat Rovira i Virgili** | **Institute for Research Development, Training and Advice**