

7th International School on Big Data

 BigDat 2021 Autumn

Beersheba, Israel - October 10-14, 2021

Keynotes



Valerie Daggett (University of Washington) - **Dynameomics: From Atomistic Simulations of All Protein Folds to the Discovery of a New Protein Structure to the Design of a Diagnostic Test for Alzheimer's Disease**



Maria Girone (European Organization for Nuclear Research) - **Big Data Challenges at the CERN HL-LHC**



Lisa Schurer Lambert (Oklahoma State University) - **Research Methods as a Lens: How We Know What We Know**

Courses



Paolo Addresso (introductory/intermediate) [introductory] **Data Fusion for Remotely Sensed Data**



Thomas Bäck & Hao Wang (Leiden University) [introductory/intermediate] **Data Driven Modeling and Optimization for Industrial Applications**



Marcelo Bertalmio (Spanish National Research Council) [intermediate] **Novel Vision Models in Image Processing, and How They Can Improve Artificial Neural Networks**



Gianluca Bontempi (Université Libre de Bruxelles) [intermediate/advanced] **Machine Learning against Credit-card**

Fraud: Lessons Learned from a Real Case



Altan Cakir (Istanbul Technical University) [intermediate] **Big Data Analytics with Apache Spark**



Michael X. Cohen (Radboud University Nijmegen) [introductory] **Dimension Explosion and Dimension Reduction in**

Brain Electrical Activity



Ian Fisk (Flatiron Institute) [introductory] **The Infrastructure to Support Data Science**



Michael Freeman (University of Washington) [intermediate] **Interactive Data Visualization Using D3 + Observable**



David Gerbing (Portland State University) [introductory] **Derive Meaning from Data with R Visualizations**



Christopher W.V. Hogue (Ericsson Inc.) [introductory] **Applied Information Theory for Scalable Database Schema and**

Query Templates



Ravi Kumar (Google) [intermediate/advanced] **Clustering for Big Data**



Victor O.K. Li (University of Hong Kong) [intermediate] **Deep Learning and Applications**



Wladek Minor (University of Virginia) [introductory/Advanced] **Big Data in Biomedical Sciences**



José M.F. Moura (Carnegie Mellon University) [introductory] **Graph Signal Processing**



Panos Pardalos (University of Florida) [intermediate/advanced] **Optimization and Data Sciences Techniques for Large**

Networks



Valeriu Predoi (University of Reading) [introductory] **A Beginner's Guide to Big Data Analysis: How to Connect**

Scientific Software Development with Real World Problems



Karsten Reuter (Max Planck Society) [introductory/intermediate] **Machine Learning for Materials and Energy**

Applications



Ramesh Sharda (Oklahoma State University) [introductory/intermediate] **Network-based Health Analytics**



Steven Skiena (Stony Brook University) [introductory/intermediate] **Word and Graph Embeddings for Machine**

Learning



Alexandre Vaniachine (VirtualHealth) [intermediate] **Open-source Columnar Databases**



Sebastián Ventura (University of Córdoba) [intermediate/advanced] **Supervised Descriptive Pattern Mining**



Xiaowei Xu (University of Arkansas, Little Rock) [introductory/advanced] **Language Models and Applications**

Organizers:

More info: <https://irdta.eu/bigdat2021a>

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