

EUT+ ORGANIZES ITS SECOND DATA SCIENCE WORKSHOP

29-30 SEPTEMBER 2022 | UTT | FRANCE



Within the frame of the next EUT+ week, we are organizing a workshop on "Data Science and Applications". This workshop is a good opportunity to foster further the collaboration within the recently established EUT+ Data Science Lab. Two learning sessions on Advanced Statistics with R and Edge Deep Learning are proposed for PhD students. We cordially invite PhD students to contribute a poster presentation on their research.

FINAL PROGRAM, BOOK OF ABSTRACTS & REGISTERED TALKS ON

<https://www.univ-tech.eu/the-institutes>

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Second Data Science Institute Workshop (Hybrid Form)

Thursday 29th – Friday 30th September at UTT, Troyes



General Chair: Prof Hichem SNOUSSI (UTT)

Within the frame of the next EUT+ week, we are organizing a workshop on "Data Science and Applications" on 29th - 30th September 2022. This workshop is a good opportunity to foster further the collaboration within the recently established EUT+ Data Science Lab.

The workshop features 2 teaching sessions and one dedicated PhD presentation session. Contributions will be published in EUT+ Academic Press.

Workshop topics (but not limited to):

- Artificial Intelligence
- Big data
- Data driven technologies
- Machine learning
- Signal/Image / graph processing
- Digital communications
- Networks
- Robotics / autonomous agents
- Distributed processing / sensor networks
- Operational research / optimization / transport
- Embedded IA / electronics / sensors
- Data mining / decision making
- Text processing
- Forensics and cybersecurity
- Natural Language Processing
- AI explicability
- Symbolic AI
- Human and social sciences in AI

ORGANISING COMMITTEE

- Andreas Weinmann (h_da, Germany) andreas.weinmann@h-da.de
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 - Prof. Pramod Pathak (TUD, Ireland), Pramod.Pathak@TUDublin.ie
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Workshop program at a glance

Thursday 29th morning for PhD Students

9:00 - 10:15: Teaching session I: Advanced statistics with R

Room: C210 – C208

10h15-11h15: Coffee Break hall building M

11h15-12h15: Teaching session II: Advanced statistics with R

Room: C210 – C208

12:30-14h00 Lunch (M104)

Thursday 29th afternoon

14:00-15:30 - room: C210

<https://zoom.us/j/96056777974?pwd=OUeWVGfndVRVaHBKSERoTk0zbXQrZz09>

ID: 960 5677 7974

Code: 535017

14:00 A talk given by Prof Hichem Snoussi, UTT

14:30 A talk given by Prof Desislava Ivanova, TU Sofia

15:00 A talk given by Andreas Weinmann, h_da

15:30-16h15: Coffee Break hall building M

16:15-18:15 - PhD presentation sessions

Session 1: Presentation session with Posters – in room B106

Session 2: Oral presentations (online session)– in room H014

<https://zoom.us/j/94042858001?pwd=SkR1UWIMdFI2RzRyVWpIeUl6Tm5KQT09>

ID:94042858001

Code: 637818

Session 3: Oral presentations (online session)– in room G110

<https://zoom.us/j/96988942727?pwd=aGtYeHRXWTFNWjR5aUFDNW5QaU5QZz09>

ID: 969 8894 2727

Code: 653930

18:15-19:00 Discussions about Data Science Institute (Committee members)

<https://zoom.us/j/97747762017?pwd=TmlRREgwVUJHZmszSVV3YjRYeHZRZz09>

ID: 977 4776 2017

Code: 337683

Friday 30th morning – room B106

<https://zoom.us/j/91544096910?pwd=Ukx5THJBa2doaDI2UDE1cTRPTkRQUT09>

ID: 915 4409 6910

Code: 760543

09:00 A talk given by Frederic Bertrand, UTT

09:30 A talk given by Sotirios Chatzis, CUT

10:00 A talk given by Lola Cano, UPCT

10:30 A talk given by Ilze Birzniece, RTU

11:00-11h30: Coffee break hall building M

11:30 A talk given by Sergiu Nedeveschi, TU Cluj

12:00 A talk given by Pramod Pathak, TU Dublin

12:30-14h Lunch & Closing of Workshop

Detailed program for PhD sessions

16.15 - 18.15	Session 1: Presentation session with Posters – in room B106
	Synthetic Data for Drone Detection and the Simulation-Reality Gap Tamara R. Dieter (joint work with Andreas Weinmann and Eva Brucherseifer), h_da
	AI applications for nature and wildlife conservation Vanessa Suessle (joint work with Andreas Weinmann, Elke Hergenroether and Colleen T. Downs), h_da
	SOILTRACKING : Wireless Sensor Network for polluted soil tracking Edern VIANNAY, Hichem SNOUSSI, LIST3N, UTT
	Sensitivity analysis and Sobol' indices determination in the case of the stochastic simulator Elizaveta Logosha, Myriam Maumy, Frederic Bertrand, LIST3N, UTT
	Optimizing the quality of service on various LoRa network slices in a multi-agent environment based on federated reinforcement learning OSSONGO Eric Blaise, ESSEGHIR Moez, MERGHEM-BOULAHIA Leila, LIST3N, UTT
	A framework for preprocessing event logs for deep learning Benoit Vuillemin, Frédéric Bertrand, LIST3N, UTT
	DéFraP-COVID: Detection of Physical Frailty and Infectious Diseases M. Ghourabi, F. Chehade, A. Chkeir, LIST3N, UTT
	Event Ordering Enhancement using a Novel Timeframe Approach Nour Matta, Nada Matta, LIST3N UTT and Nicolas Declercq, Namkin
	Order acceptance scheduling under environmental constraints Mariam Bouzid, Oussama Masmoudi, Alice Yalaoui, LIST3N, UTT
	Multi-task Lasso for the selection of a subset of features for estimating a multidimensional vector M. Kanouté, E. Grall-Maës, P. Beuseroy, B. Birregah, P. Meyer, LIST3N UTT

	Demand-side management algorithm for smart homes: application to smart grids Bashar Chreim, Moez Esseghir and Leila Merghem-Boulahia, LIST3N, UTT
	Process Crowding: Feature Engineering for Improved Process Predictions Yoann Valero, Frédéric Bertrand and Myriam Maumy, LIST3N, UTT / 2Your Data Consulting – Livejourney
	Detection of Heart Failure Using a Convolutional Neural Network via ECG Signals Jad Botros, Farah Mourad-Chehade and David Laplanche, LIST3N UTT and Hôpitaux Champagne Sud
16.15 - 18.15	Session 2: Oral presentations (online session) – in room H014
16.15-16.30	Data engineering towards predictive and preventive maintenance Raluca Portase, Ramona Tolas, Rodica Potolea, Technical University of Cluj Napoca
16.30-16.45	Urban Mapping and Navigation Support Using Machine Learning Fatma El-zahraa El-taher, Luis Miralles-Pechuán, Jane Courtney, Susan Mckeever Technological University Dublin
16.45-17.00	MultiObject tracking in autonomous systems Mircea Paul Muresan, Sergiu Nedevschi, Technical University of Cluj-Napoca
17.00-17.15	Language-Driven Region Pointer Advancement for Controllable Image Captioning Annika Lindh, Robert Ross, John D. Kelleher, Technological University Dublin
17.15-17.30	Artificial Intelligence in Thyroid and Colorectal Cancer Detection Lorenzovici Noemi, Dulf Eva Henrietta, Technical University of Cluj-Napoca
17.30-17.45	Data Mining in Disaster Early Warning Using Crowd- Sourced Data Dan Xu, Technological University Dublin
17.45-18.00	Improving Point Cloud Shapes Classification with Graph Structures Vasile Suci, Prof. Dr. Eng. Rodica Potolea, Technical University of Cluj-Napoca
18.00-18.15	Assessing the Condition of Pavements (Road Surfaces) using Computer Vision & Machine Learning Syed Ibrahim Hassan, Dympna O’Sullivan, Susan Mckeever, Kieran Feighan and David Power, Technological University Dublin
16.15 - 18.15	Session 3: Oral presentations (online session)– in room G110
16.15-16.30	Big Data Analytics and Machine Learning to improve the Quality of Life Eng. Alexandru-George BERCIU, Technical University of Cluj-Napoca
16.30-16.45	Exploring End-Users’ Mental Models for Explainable AI: A Design Thinking Approach Helen Sheridan Dympna O’Sullivan, Emma Murphy, Technological University Dublin
16.45-17.00	Computer Science applied in Neuroscience Eugen-Richard Ardelean, Technical University of Cluj-Napoca
17.00-17.15	Transfer of Personality through Text Style Michael O’Mahony, Robert Ross, Technological University Dublin
17.15-17.30	Knowledge inference from sensorial data: user profiling based on home appliances usage Ramona Tolas, Raluca Portase, Rodica Potolea, Technical University of Cluj Napoca
17.30-17.45	Two Embodiments Transferring Studies in Confusion Detection Na Li, Technological University Dublin
17.45-18.00	Progressive Transformer Applied on a Novel Greek Dataset Andreas Nikolaidis and Sotirios Chatzis, Cyprus University of Technology
18.00-18.15	Measuring Gender Bias in Textual Training Data for Machine Learning Tasks Nasim Sobhani, Sarah Jane Delany, Technological University Dublin