

IDSi 2023

The Second International Israel Data Science Initiative Conference

Ein Gedi

08/01/2023 - 11/01/2023

Schedule



Sunday, 8.1.2023

08:30-11:00	Registration Welcome (Avni Hall)	
11:00-11:20	Opening Remarks Paul Feigin (Avni Hall)	
11:20-12:20	K1: Keynote Speaker, Prof. Francisco Chinesta <i>Chair: Paul Feigin</i> (Avni Hall)	
12:20-13:45	Lunch	
	S1 A (Avni Hall) : Biomedical informatics <i>Chair: Mark Last</i>	S1 B (Amichai Hall) : Sound Applications <i>Chair: Roe Diamant</i>
14:00-14:20	Text Mining for Past Medical History in Electrodiagnostic Studies <i>Roni Ramon-Gonen</i>	Deep MUSIC Algorithms for Data-Driven DoA Estimation <i>Nir Shlezinger</i>
14:20-14:40	Optimizing Surgery Duration via Prediction and Causality Analysis <i>Onn Shehory</i>	A Graph-Based Clustering of Chirplet Signals Towards Monitoring of Coastal Dolphins <i>Roe Diamant</i>
14:40-15:00	Locally Sparse Neural Networks for Tabular Biomedical Data <i>Ofir Lindenbaum</i>	Single Microphone Speaker Extraction Using Unified Time-Frequency Siamese-Unet <i>Sharon Gannot</i>

15:00-15:20 Using ECG signals for hypotensive episode prediction in trauma patients | *Mark Last* (Avni Hall) | *Rami Puzis* (Amichai Hall) | Can one hear the position of nodes? |

15:20-15:35 **Coffee Break | Hotel Check In & key distribution** (Avni Hall)

S2 A (Avni Hall) | *Chair: Tsvi Kuflik*

15:40-16:00 Automatic Identification of Rhetorical Elements in Classical Arabic Poetry | *Tsvi Kuflik and Ali Hussein*

16:00-16:20 Causal Inference Under Misspecified Interference | *Bar Weinstein*

16:20-16:40 Imams, Social Media, and Pro-Regime Mobilization in Turkey | Michael Freedman | *Bar Weinstein*

16:40-17:00 Using a Machine Learning Approach to Promote Early Detection of Autism Risk from Infant Electronic Health Records | *Ayelet Ben-Sasson*

18:00-19:00 **Dinner**

19:15-19:30 **Reception** (Amichai Hall)

19:30-21:30 **Poster Session 1** (Amichai Hall)

M1 A (Avni Hall) :

NLP and Vision |

Chair: Yaakov Ophir

M1 B (Amichai Hall)

: *Chair: Kfir Levy*

09:00-09:20

Identifying Women with Post-Delivery Posttraumatic Stress Disorder using Natural Language Processing of Personal Childbirth Narratives | *Alon Bartal*

Imbalanced Mixed Linear Regression | *Pini Zilber*

09:20-09:40

Two new approaches to textual data augmentation | *Dan Vilenchik*

Dimension reduction, the curse of continuity, and topological data analysis | *Emanuel (Menachem) Lazar*

09:40-10:00

Using the Deep Learning Computer Vision Tool of CLIP to Predict High Suicide Risk from Facebook images | *Yaakov Ophir*

Robust Linear Regression For General Feature Distribution | *Kfir Levy*

10:00-10:15

Coffee Break

M2 A (Avni Hall) :
Computational Biology |
Chair: Judith Somekh

M2 B (Amichai Hall) *Chair: Dana Lahat*

10:20-10:40

BitterMatch:
Recommendation
Systems for Matching
Molecules with Bitter
Taste Receptors | *Yuli
Slavutsky*

A New View of
Inverse Problems
via Diffusion
Models | *Michael
Elad*

10:40-11:00

G-S-M: Grouping,
Scoring and Modeling
Approach. Integration of
Biological Domain
Knowledge to Machine
Learning Based Gene
Expression Data Analysis
for Selecting Affected
Gene Sets | *Malik Yousef*

Conformance
Checking Over
Stochastically
Known Logs | *Eli
Bogdanov*

11:00-11:20

Unsupervised approach
for detecting whole-
body gene expression
coordination pattern |
Judith Somekh

Interactive
Explanations Of
Agent Behavior |
Yotam Amitai

11:20-11:40

Using data processing
methods for
understanding
immune germline and
somatic selection |
Itai Danielli

Multimodal Data
Fusion: An
Overview of
Methods,
Challenges and
Prospects | *Dana
Lahat*

11:50-12:50 **K2: Keynote Speaker, Prof. Ido Dagan |**
Chair: Sol Efroni (Avni Hall)


12:50-13:45 **Lunch + Preparing for the trip**

13:45-17:00 **2 options for trips near Ein Gedi**

18:30-19:30 **Dinner**

19:30-21:30 **Poster Session 2** (Amichai Hall)

Tuesday, 10.1.2023

08:45-09:45 
**Google Cloud for Research using AI/ML
and Data Analytics, Niv Efron, Chen
Blecher, Gavriel Mitrani |**
Chair: Isana Veksler-Lublinsky (Avni Hall)

T1 A (Avni Hall)
Chair: Eli Safra

T1 B (Amichai Hall)
*Chair: Galit
Almoznino*

10:00-10:20 Thrill ride:
Recommendations in
Transportation
Systems | *Eli Safra*

Modelling COVID-
19 Spread in a
Complex Reality |
Hilla De-Leon

10:20-10:40 Unsupervised Acoustic
Scene Mapping Based
on Acoustic
Measurements and
Dimensionality
Reduction | *Idan
Cohen*

Performative
Prediction in a
Stateful World |
Shlomi Hod

10:40-11:00

Rheumatic Monitor: A New Architecture For Screening, Monitoring And Analyzing Big Data Of Multiple Rheumatic Disease Patients: The Case Study Of Fibromyalgia | *Galit Almoznino*

11:00-11:20

Coffee Break

T2 A (Avni Hall)
Chair: Guy Gilboa

T2 B (Amichai Hall) :
Computational Biology | *Chair: Isana Veksler-Lublinsk*

11:20-11:40

More Than Meets the Eye - Anesthesiologists' visual attention in the operating room | *Sapir Gershov*

Model-free prediction of microbiome compositions | *Amir Bashan*

11:40-12:00

Dimensionality Reduction of the Dynamics of Neural Network Training | *Guy Gilboa*

Canonical Correlation Analysis for Multi-Trait GWAS | *Or Zuk*

12:00-12:20

FlexER: Flexible Entity Resolution for Multiple Intents | *Bar Genossar*

Transfer learning improves cross-species prediction of miRNA-target interactions | *Eyal Hadad*

12:20-14:00

Lunch

T3 A (Avni Hall)

Chair: Orit Hazzan

T3 B (Amichai Hall)

Chair: Nir Weinberger

14:00-14:20

A Dynamic Networks Approach to Language Development | *Elitzur Dattner*

Active Probabilistic Databases | *Osnat Drien*

14:20-14:40

Guide to Teaching Data Science: Pedagogical Principles and Main Topics | *Orit Hazzan*

Baroque Simplicity: Simplicity Bias in Overparameterized Machine Learning | *Yakir Berchenko*

14:40-15:00

Classification of point patterns using topological pair correlations | *Gil Ariel*

Fast Nonlinear Vector Quantile Regression | *Aviv Rosenberg*

15:00-15:20

Increasing the Adoption of Responsible AI and Data Science | *Ravit Dotan*

Mean Estimation in High-Dimensional Binary Markov Gaussian Mixture Models | *Nir Weinberger*

15:20-15:40

Coffee Break

T4 A (Avni Hall) :
Causal Inference |
Chair: Bella
Vakulenko-Lagun

15:40-16:00

Identifying causal determinants of hospital outcomes from electronic health records using causal graphical learning | *Daniel Malinsky*
(Recorded lecture + Live Zoom Q&A session)

16:00-16:20

Negative controls for instrumental variables | *Daniel Nevo*

16:20-16:40

The computation and use of tight symbolic nonparametric bounds | *Erin Gabriel*

16:40-17:00

Using Machine Learning and Causal Inference to Improve Patient Care and Reduce Costs in Diagnosis of Blood Cancers | *Michael Sachs*

T4 B (Amichai Hall) :
Data Science for
Animals | Chair:
Anna Zamansky and
Itzik Klein

15:40-16:15

A New View of Inverse Problems via Diffusion Models | *Oren Forkosh*,
Invited Speaker

16:15-16:30

Automated Recognition of Animal Affective States | *Marcelo Feighelstein*

16:30-16:45

Interactive Computer Vision based system in Precision Livestock for automatic lamb identification and drinking activity | *Adi Alon*

16:45-17:00

Canine Ataxic Classification Using Inertial Sensors | *Itzik Klein*

17:00-17:15

Coffee Break

17:15-18:15

K3: Keynote Speaker, Prof. Marina Sirota |
Chair: Judith Somekh | Recorded lecture +
Live Zoom Q&A session (Avni Hall)

19:30-21:30

Gala dinner

Wednesday, 11.1.2023

08:30-09:00

Check out | Coffee

09:45-10:00

K4: Keynote Speaker, Prof. Nitesh Chawla |
Chair: Mark Last (Avni Hall)

10:00-10:10

Penultimate Remarks | Paul Feigin (Avni Hall)

W1 A (Avni Hall) :
Data-science for
improving health
care systems |
Chair: Nadav
Rappoport

T1 B (Amichai Hall) :
Data Science for
Social Good | Chair:
Yuli Slavutsky

10:20-10:40

Treatment
Prediction in the
ICU Setting Using a
Partitioned
Sequential Deep
Time Series
Analysis | *Yuval*
Shahar

Leveraging Data
Science for Social
Good: Introducing
the New Program at
the Hebrew
University | *Yuli*
Slavutsky

10:40-11:00

Time-Dependent
Iterative
Imputation for
Multivariate
Longitudinal Clinical
Data | *Omer Noy*

Temporal
Changes in Bird
Migration
Patterns - A Data
Science for Social
Good Project |
Ariel Vishne

11:00-11:20

Optimizing
Operation Room
Utilization—A Multi-
Centers Prediction
Model | *Nadav
Rappoport*

Data Science for
Social Good – Open
Discussion | Ronit Lis
Hacohen

11:20-11:40

Personalizing Digital
Health Interventions
with AI to Support
Behavior Change |
Mor Peleg

11:30

Lunch Box



Visit the conference website for more information



Teching the next tomorrow.

