

The Bar-Ilan Data Science Institute Update

December 2018

.....

Upcoming Events

Technical talks

- [Deep Entities and Convolutional Sentiments](#). 26 Dec 2018, 18:00-20:00.
(As part of [News, Economics and AI meetup](#))
- [IBM Debating Technologies group](#), talk by Dr. Roy Bar-Haim. 30 Dec, 12:00-13:00.
(As part of the [DSI Learning Club Talk](#))
- [Relational Private Law and Network Theory](#). 2 Jan 2019, 14:00-16:00.

Events

- [Data Science Exposure for Humanities Faculty](#). 14 Jan 2019, 12:00-14:30.
 - [Hacking Deep Learning 2](#). 22 Jan 2019, 09:00-17:00.
 - [Technological Tools for Manuscript Research Workshop](#). 10-13 Feb 2019.
-

Recent Events

- [S.O.U.N.D. Workshop 2018 on Automatic Methods for Analyzing and Predicting Social Structure from Diverse Auditory Data Sets](#) was held at Bar-Ilan University on December 17-19, 2018 and co-sponsored by Bar-Ilan Rector, the Israeli Science Foundation (ISF) and the DSI. Twenty seven senior researchers from USA, Europe and Israel participated, covering diverse fields of knowledge: Psychology, Behavioral Ecology and Zoology, Computer Science, Linguistics, and Electrical Engineering, presented their work and held extensive discussions. This multidisciplinary workshop was dedicated to discussions about the possibilities now available through advances in signal processing and machine learning that can lead to a broader and more holistic understanding of the role of voice, speech and language in social structure across a wide range of relationships, both in humans and animals.



- The [First Japan-Israel Machine Learning Workshop](#) was held at Bar-Ilan University, The Gonda Multidisciplinary Brain Research Center Auditorium, Israel on November 19-20, 2018. Twenty six researchers from RIKEN AIP participated. Diverse aspects of machine learning was discussed, including: Theory and algorithms, Machine Learning for Social Good, and Ethics of AI.



Photo: From the left, RIKEN AIP Deputy Director Prof. Naonori Ueda, Director Prof. Masashi Sugiyama, Prof. Amir Globerson (Tel-Aviv University), Prof. Gal Chechik (Bar-Ilan University).

- [Conference on Policy Implementation in the Big Data era](#). 6 Nov 2018 at the Knesset.
 - Prof. Oren Perez and Prof. Ido Dagan gave a talk on Regulation Supervision and Policy Implementation in the Big Data era.
 - Dr. Ariel Rosenfeld spoke on AI-driven data for the sake of war on road accidents.
 - Follow up collaboration between Faculty of Law, the DSI and יחידת נת"ף of the Knesset.



- [Latest Research by the Bar-Ilan NLP Lab](#). 24 Oct 2018. As part of the News, Economics and AI meetup, the DSI hosted a special meetup showcasing recent work done by the BIU NLP lab. Over 150 attendances enjoyed beer and pizza while listening to talks by Prof. Ido Dagan, Prof. Yoav Goldberg and the lab's grand students.
- [Data Science Environmental Applications – Government and Academia workshop](#). 23 Oct 2018.
 - Sponsored by DSI, Water Authority and MIMSHAK with over 100 people attended.
 - Including talks by Prof. Ido Dagan, Dr. Ariel Rosenfeld, Dr. Yuval Hadas, Dr. Jonathan Schler, Prof. Roy Gelbard, Prof. Gal Chechik, Prof. Itamar Lensky and Prof. Yoram Louzoun.
 - Panel with participation of Prof. Shulamit Michaeli and Dr. Eyal Yaniv.

Computing Infrastructure

- An ISF grant for institutional equipment submitted by 7 DSI members has been approved. We are in the process of ordering and installing a GPU cluster for Deep Learning that will include 3 of NVIDIA's DGX-1 servers.
- We have set up an Elasticsearch cluster for the benefit of the DSI members, addressing sophisticated text search needs. Contact us if you plan to use Elasticsearch and/or have a large data set of texts or other database needs.
- We also have a few GPU machines and regular compute machines available to DSI members. Reach out if you would like to use them or if you have other.

Supporting Research & Education

- Joint work with grad student of Prof. Rachel Dekel (*Social Work*). Conference paper accepted to ISTSS: "[Are ICD-11 PTSD and CPTSD Different from Depression and Anxiety? A Network Analysis Perspective](#)". Gilbar, Ohad, Dekel, Rachel, Glickman, Oren.
- As part of collaboration with Dr. Galit Nahary (*Criminology*). Invited talk by Dr. Jonathan Schler on "Automated text classification and its applications for detecting truths and lies", as part of "Language of lies: recent advances in research and future prospects" Workshop, November 29, 2018.
- *School of Education* faculty colloquium talk by Dr. Oren Glickman on Data Science and AI. Nov 20, 2018.
- CS master project completed on extracting citations from court proceedings with Prof. Oren Perez (*Law*), Prof. Reuven Cohen (*Math*), Prof. Ido Dagan (*Computer Science*) and Dr. Oren Glickman.
- Support on Dr. Ittai Bar-Siman-Tov (*Law*) research on constitutional deliberations. Analysis of Knesset committee minutes. Work presented in recent workshops. Publication expected in 2019.
- Advising 3rd year CS project (תשע"ט) with Amiyaal Ilany (*Life Sciences*) on analysis of Hyrax behaviour from sensor data.
- Technical work and support on work by Dr. Gila Prebor and Dr. Maayan Geffet from *Information Science* Dept. on classification of Hebrew manuscripts. Resulting journal paper submitted to Digital Scholarship in the Humanities.
- [Introductory Data Science course](#) at the *Faculty of Law*, with the support and accompaniment of the DSI. The course *Data Science for Law* (מדע הנתונים למשפטים), course number 999025-01 is being given during first semester of תשע"ט by Dr. Yair Even-Zohar.

DSI News

- We are happy to welcome Dr. Adi Lazar, who joined us in October as the DSI Academic and Administrative manager. Adi has a PhD Degree in Economics and is a CPA (Certified Public Accountant). Adi is involved particularly in the DSI public relations activity, including upgrading the DSI website, and in promoting data science education offerings at Bar-Ilan.
- Forthcoming VATAT Funding
 - Prof. Gal Chechik, as a representative of Bar-Ilan, is an official member of the VATAT committee dealing with budgeting the Data Science field, particularly, Data Science centers in academic institutions.
 - Kol-Koreh (RFP) is scheduled to come out during spring 2019. We'll appreciate your help during this time in preparing and submitting the call.

The DSI team, dsi@biu.ac.il