Curriculum Vitae
Abraham (Avrahami) Israeli

+972-52-3469880, +1-734-5854291

isabrah@umich.edu

Online profiles: [Google Scholar,](#) [LinkedIn Profile](#)

Website: https://avrahami-israeli.com

Education

2024-Now   Postdoctoral Researcher Fellow at the University of Michigan, School of Information.
Hosts: Prof. Daniel Romero and Prof. David Jurgens.

2018-2023   Ph.D. in data science. Software and Information Systems Engineering (SISE), Ben Gurion University of the Negev.
Supervisor: Dr. Oren Tsur.
Dissertation Title: Multimodal Approaches for Modeling the Dynamics of Online Communities. Submitted on 10/2023, approved on 4/2024.

2015-2018   MSc in machine learning and data science. Software and Information Systems Engineering (SISE), Ben Gurion University of the Negev.
Supervisors: Prof. Lior Rokach and Prof. Asaf Shabtai.
Average grade: 93.9; Thesis grade: 94; Summa cum Laude.

2007-2011   BSc in Industrial Engineering & Mgmt and BA in Economics.
Affiliation: Technion, Israel Institute of Technology, Haifa, Israel.
Average grade: 92.4; Summa cum laude.

Professional Experience

2020-Now   **Research Fellow**, [The Data Science Institute (DSI)](#); Reichman University, Israel.
Leading all NLP and social-media research projects. Projects are geared towards applicable solutions, with solid academic orientation, and typically consist of 6-10 researchers.

2018-2020   **Senior Data Scientist,** Advanced Analytics, Intel.
Responsible for developing NLP-based algorithms, including deployment to the production of sales and marketing applications.

2016-2018   **Senior Data Scientist Manager**, Advanced Analytics, Intel.
Responsible for the whole data science activity in the group, including production deployments of machine learning solutions. Direct manager of 6-7 data scientists.

2012-2016   **Data Scientist**, Advanced Analytics, Intel.
Developing machine-learning solutions. Primarily applying regression and classification algorithms. Responsible for the education sessions in the field of artificial intelligence.

2010-2012   **Research Assistant**, IBM Labs, Haifa, Israel.
Working on a water consumption prediction project for the IBM 'Smart Planet' initiative. Responsible for developing regression prediction models.

Academic Professional Activities

Talks and Invited talks

- "With Flying Colors: *Predicting Community Success in Large-scale Collaborative Campaigns*"; International Conference on Computational Social Science (IC2S2, Philadelphia July 2024)
- "The Internet's Best Experiment Yet"; PyData Global conference (December 2023.)
- "Multi-Modal Approaches for Modeling the Dynamics of Online Communities"; Statistics and Data Seminar, Ben-Gurion University (Israel, November 2023.)
- *"Complex Modeling of Online Communities";* the Hebrew University Business School research seminar (Israel, May 2023.)
- *"Complex Representations of Online Communities";* The SISE Data Science seminar, Ben-Gurion University of the Negev (Israel, November 2022.)
- *"This Must Be the Place: Predicting Engagement of Online Communities in a Large-scale Distributed Campaign"*; The AI Data Science Summit (Israel, May 2022.)
- *"Data Understanding and Data Pre-Processing for Machine Learning"*; The "Israeli Tech Challenge" (seven times, 2015-2021.)
- *"Osprey: Weak Supervision of Imbalanced Problems without Code"*; DMBI conference (Israel, May 2019.)
- *"Natural language processing landscape, in perspective of the mental health community"*; International Symposium on Computational Methods for Mental Health (Israel, Sep. 2019.)
- *"3COM, Compact Community Comparison"*; ISCOL* (Israel, October 2019.)

Posters

- *"With Flying Colors: Predicting Community Success in Large-scale Collaborative Campaigns";* NLP & Networks Bar-Ilan University Spotlight Event (Israel, September 2023.)
- *"Free Speech or Free Hate Speech? Hateful Users Detection and Analysis in Parler and Gab";* ISCOL* (Israel, Sep. 2021.)
- *"Predicting Engagement of Online Communities in a Large-scale Distributed Campaign";* ISCOL* (Israel, October 2019.)

* ISCOL: **I**sraeli **S**eminar on **Co**mputational **L**inguistics

Program Committee and Reviewer Roles
- *International Conference on Web and Social Media (ICWSM), 2018, 2020, 2023.*
- *International conference on Computational Social Science (IC2S2), 2024*
- *Workshop on Online Abuse and Harms (WOAH), 2024*
- *Data Mining and Knowledge Discovery Journal, 2023-2024*

Honors and Awards:
- **The Israeli President's Prize** for Excellence in Science and Innovation 2020 (among 12 Ph.D. students to receive the triennial scholarship based on my Ph.D. research proposal and work.)
- **Engineering Dean's excellence list 2023** (Ph.D., 5th year.)
- **NAACL WOAH workshop scholarship 2022** (Ph.D., 4th year.)
- **Full travel grant** [EurNLP 2019](#) (Ph.D., first year.)
- **Outstanding Teaching Assistant Award** (BSc (Technion), four times out of 4 semesters.)
- **President's list** (BSc (Technion), six times out of 8 semesters.)

Teaching
Spring 22-23 Head Teaching Assistant for Social Network Analysis (SNA) course (372.1.4403), Ben Gurion University.

Winter 22-23 Lecturer for Advanced Statistics course (382.1.2201), Ben-Gurion University.

Spring 21-22 Head Teaching Assistant for Advanced Machine Learning course (3603), Reichman University.

Winter 21-22 Lecturer for Advanced Statistics course (382.1.2201), Ben-Gurion University.

Spring 20-21 Head Teaching Assistant for Advanced Machine Learning course (3603), Reichman University.

Spring 20-21 Head Teaching Assistant for Statistics course (372.1.3071), Ben-Gurion University.

Winter 20-21 Head Teaching Assistant for Social Network Analysis (SNA) course (372.1.4403), Ben Gurion University.

Spring 19-20 Head Teaching Assistant for Advanced Machine Learning course (3603), Reichman University.

Spring 19-20 Lecturer for Statistics course (372.1.3071), Ben-Gurion University.

Spring 11-12 Head Teaching Assistant for Methods in Data Mining (096411), Technion.

Spring 10-11 Teaching Assistant for Probability (094411), Technion.

Winter 10-11 Teaching Assistant for Stochastic Models (094314), Technion.

Spring 09-10 Teaching Assistant for Probability (094411), Technion.

Publications

DiaSet: An Annotated Dataset of Arabic Conversations
Israeli, Abraham, Aviv Naaman, Guy Maduel, Rawaa Makhoul, Dana Qaraeen, Amir Ejmail, Dina Lisnanskey, Julian Jubran, Shai Fine, Kfir Bar
In Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING) 2024

With Flying Colors: Predicting Community Success in Large-scale Collaborative Campaigns
Israeli, Abraham, and Oren Tsur
In Proceedings of the AAAI Conference on Web and Social Media (ICWSM) 2024

This Must Be the Place: Predicting Engagement of Online Communities in a Large-scale Distributed Campaign
Israeli, Abraham, Alexander Kremiansky, and Oren Tsur
In Proceedings of the ACM Web Conference 2022 (pp. 1673-1684)

Unsupervised Discovery of Non-Trivial Similarities Between Online Communities
Israeli, Abraham, Shani Cohen, Oren Tsur
Expert Systems with Applications 206 (2022): 117900

Free speech or Free Hate Speech? Analyzing the Proliferation of Hate Speech in Parler
Israeli, Abraham, and Oren Tsur
In Proceedings of the Sixth Workshop on Online Abuse and Harms (WOAH), pp. 109-121. 2022

Love Me, Love Me Not: Human-Directed Sentiment Analysis in Arabic
Israeli, Abraham, Aviv Naaman, Yotam Nahum, Razan Assi, Shai Fine, and Kfir Bar
Proceedings of the Third International Workshop on NLP Solutions for Under Resourced Languages (NSURL 2022) co-located with ICNLSP 2022

The IDC System for Sentiment Classification and Sarcasm Detection in Arabic
Israeli, Abraham, Yotam Nahum, Shai Fine, and Kfir Bar
Proceedings of the Sixth Arabic Natural Language Processing Workshop, pp. 370-375. 2021

Constraint learning based gradient boosting trees
Israeli, Abraham, Lior Rokach, and Asaf Shabtai
Expert Systems with Applications 128 (2019): 287-300

Osprey: Weak supervision of imbalanced extraction problems without code
Bringer, Eran, **Abraham Israeli**, Yoav Shoham, Alex Ratner, and Christopher Ré

Proceedings of the 3rd International Workshop on Data Management for End-to-End Machine Learning. 2019

Languages

- Hebrew (native)
- English (fluent)
- French (basic)

Other Noteworthy Activities and Skills

Hobbies: Hiking, Trekking, running, basketball, carpentry.

Marathon runner, Tel Aviv 2014