

TEDDY LAZEBNIK

Last update: 15.1.2024

PROFESSIONAL SUMMARY

Mathematical models and algorithms researcher and developer in the fields of epidemiology, medicine, economics, and information systems. More than a decade of experience in software development in the industry, including seven years of experience as an algorithm developer with a focus on data-driven algorithms for bio-medical tasks.

ACADEMIC EDUCATION

Ariel University 2020 - 2021

Ph.D. in (Bio)mathematics

- Thesis about "Modeling and Numerical Calculation of Pandemic Spread and Optimal Oncology Treatment Protocols" - supervised by Prof. Svetlana Bunimovich-Mendrazitsky.

Bar-Ilan University 2017 - 2018

M.Sc. in Applied Mathematics

- Thesis about "Highly Stable Numerical Algorithm for Matrix Exponent" - supervised by Dr. Shlomo Yanetz.

Bar-Ilan University 2013 - 2016

B.Sc. in Applied Mathematics

- Final project about "Observable of Discrete-continuous Linear Time Interval Systems with Continuous Time Measurement".

ACADEMIC EMPLOYMENT

Ariel University, Department of Mathematics October 2023 - Current

Assistant Professor

- Lecturing Calculus 1 + 2 for mathematicians (Bachelor's degree).
- Lecturing Calculus 1 for mechanical engineering (Bachelor's degree).

Bar Ilan University October 2023 - July 2024

Teaching Associate

- Introduction for cybersecurity for managers (Bachelor's degree).

Reichman University, Department of Computer Science Feb 2023 - July 2023

Teaching Associate

- Lecturing Operation Systems (Bachelor's degree).

Bar Ilan University, Department of Information Science and Department of Management
Feb 2023 - July 2023

Teaching Associate

- Lecturing Business Intelligence (Bachelor's degree).
- Lecturing Back-end Development (Bachelor's degree).

Holon Institute of Technology, Department of Computer Science Feb 2023 - July 2023

Teaching Associate

- Lecturing "Introduction To Cybersecurity" (Bachelor's degree).
- Lecturing "The Mathematical Aspects of Cybersecurity" (Master's degree) - my own course.

University College London, Department of Cancer Biology

Sep 2021 - Aug 2023

Honorary Post-doctoral researcher (Hosted by Prof Stephan Beck)

- Developed a novel artificial genomics generator using machine learning and bio-genomic models.
- Leading research in the development of personalized medicine through data-driven algorithms.

Bar-Ilan University, Department of Computer Science

Jul 2020 - Jul 2021

Research And Teaching Assistant

- Teaching the following courses: Advanced Programming 1 and Advanced Programming 2 - all Bachelor's degree.
- Academic research guidance for Master computer science students' final project.
- Developed a Mathematical model & simulation of nanoparticles-based targeted drug delivery.
- Developed a novel academic search engine from scratch to tackle local concept drift in academic search.

Bar-Ilan University, Department of Mathematics

Oct 2018 - Jul 2020

Research And Teaching Assistant

- Teaching the following courses: Partial differential equations (PDE), Introduction to linear mathematical optimization, Numerical Analysis 1, and Tools for Numerical Programming for Engineering - all Bachelor's degree.
- Academic research guidance and code review for Bachelor and Master computer science students' final project.

Holon Institute of Technology, Department of Mathematics

Feb 2020 - Jul 2020

Lecturer

- Teaching Deep Learning for Computer Vision (Bachelor's degree).

Holon Institute of Technology, Department of Mathematics

Oct 2019 - Feb 2020

Teaching Assistant

- Teaching Numerical Analysis (Bachelor's degree).

ACADEMIC HONORS AND AWARDS

Ariel University

2022

Ph.D. student

- A prize for academic excellence with multiple high-quality publications.

Bar-Ilan University

2017

M.Sc student

- A prize for excellence in studies and research at the master's degree in the name of David Barkovski.

STUDENTS SUPERVISION

Undergraduate students

- Bar Ilan University, Chen Tal-Schachar, 2018-2019 (Under the supervision of Prof' Gal A. Kaminka).
- Bar Ilan University, Pedro Nissan, 2017-2017 (Under the supervision of Prof' Gal A. Kaminka).

M.Sc. students

- Bar Ilan University, Ariel Alexi, 2021-2022 (Help to advise with Dr. Ariel Rosenfeld).
- Tel Aviv University, Liron Simon Keren, 2021-2022 (Help to advise with Prof' Alexander Liberzon).

- University College London, Jackson Cheung, 2022 (Help to advise under the supervision of Prof' Stephan Beck).
- Ariel University, Yonatan Herskowitz, 2022-2023 (Help to advise with Dr. Svetlana Bunimovich-Mendrazitsky).

TEACHING COURSING

Academic courses

- Ariel University, Calculus 1.
- Ariel University, Calculus 2.
- Bar Ilan University, Introduction to cybersecurity for managers.
- Ariel University, Introduction to reinforcement learning [my course].
- Reichman University, Operation Systems.
- Holon Institute of Technology, Mathematical aspects in cybersecurity [my course].
- Holon Institute of Technology, Introduction to cybersecurity [my course].
- Bar Ilan University, Back-end development.
- Bar Ilan University, Business Intelligence.
- Bar Ilan University, Advanced Programming 2.
- Bar Ilan University, Advanced Programming 1.
- Bar Ilan University, Numerical Analysis (X2).
- Bar Ilan University, Introduction to Linear Mathematical Optimization and Tools for Numerical Analysis for Engineers.
- Holon Institute of Technology, Deep Learning for Computer Vision tasks.
- Holon Institute of Technology, Numerical Analysis.
- Bar Ilan University, Introduction to Linear Mathematical Optimization.
- Bar Ilan University, Partial Differential Equations.

Industry courses

- Naya College, Data Science (420 hours course): Introduction to Programming in Python, Data Analysis, Introduction to Machine Learning, Introduction to Deep Learning, and Introduction to MLOps (X2).
- Y-Data, Introduction to Machine Learning.

LIST OF PUBLICATIONS

Articles in Refereed Journals

1. G. Dinu, **T. Lazebnik**, A. Rosenfeld, M. Mincu, O. Oren, I. Nicolae, A. Zamansky, BovineTalk: Machine Learning for Vocalization Analysis of Dairy Cattle in Negative Affective States. *Frontiers in Veterinary Science*. 2024. (Accepted) - Q: 1 -Veterinary — IF = 3.2
2. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, A. Rosenfeld, An Algorithm to Optimize Explainability using Feature Ensembles. *Applied Intelligence*. 2024. (Accepted) - Q: 2 - AI — IF: 5.019
3. L. Simon-keren, **T. Lazebnik**, A. Liberzon, Improved Prediction of Settling Behaviour of Solid Particles through Machine Learning Analysis of Experimental Retention Time Data. *International Journal of Multiphase Flow*. 2024. (Accepted) - Q: 1 - Fluid Flow and Transfer Processes, Mechanical Engineering, Physics and Astronomy — IF: 3.8
4. **T. Lazebnik**, L. Shami, S. Bunimovich-Mendrazitsky, Hybrid Mathematical Model for Optimal Border Closure Policy during Pandemic. *International Journal of Applied Mathematics and Computer Science*. 2023. - Q: 2 - Applied mathematics, Computer science, engineering — IF: 2.157
5. N. Farhat, **T. Lazebnik**, J. Monteny, C. Moons, E. Wydooghe, D. van der Linden, A. Zamansky, Digitally-Enhanced Dog Behavioral Testing: Getting Help from the Machine. *Scientific Reports*. 2023. - Q: 1 - Multidisciplinary — IF: 4.997

6. J. Magana, D. Gavojdian, Y. Menachem, **T. Lazebnik**, A. Zamansky, A. Adams-Progar, Machine Learning Approaches to Predict and Detect Early-onset of Digital Dermatitis in Dairy Cows using Sensor Data. *Frontiers in Veterinary Science*. 2023. - Q: 1 - Veterinary — IF: 3.2
7. A. Oren, J. D. Turkcü, S. Meller, **T. Lazebnik**, P. Wiegel, R. Mach, H. A. Volk, A. Zamansky, BrachySound: Machine Learning Based Assessment of Respiratory Sounds in Dogs. *Scientific Reports*. 2023. (Accepted) - Q: 1 - Multidisciplinary — IF: 4.997
8. **T. Lazebnik**, D. Gorlitsky, Can We Mathematically Spot Possible Manipulation of Results in Research Manuscripts Using Benford's Law?. *Data*. 2023. - Q: 2 - Information Systems and Management — IF: 2.6
9. **T. Lazebnik**, S. Beck, L. Shami, Academic Collaboration is a Risky Game. *Scientometrics*. 2023. - Q: 1 - Computer Science Applications, Library and Information Sciences, Social Sciences — IF: 3.9
10. N. Cohen, **T. Lazebnik**, Trust and Street-Level Bureaucrats' Willingness to Risk Their Lives for Others: The Case of Brazilian Law Enforcement. *The American Review of Public Administration*. 2023. - Q: 1- Marketing, Public Administration, Sociology and Political Science — IF: 5.00.
11. **T. Lazebnik**, T. Fleischer, A. Yaniv-Rosenfeld, Benchmarking Biologically-inspired Automatic Machine Learning for Economic Tasks. *Sustainability*. 2022. - Q: 1 - Geography planning and development, 2 - computer networks and communications, energy engineering and power technology, environmental science — IF = 3.889
12. **T. Lazebnik**, Data-driven Hospitals Staff And Resources Allocation Using Agent-Based Simulation and Deep Reinforcement Learning. *Engineering Applications of Artificial Intelligence*. 2023. - Q: 1- Artificial Intelligence, Control and systems engineering, Electrical and electronic engineering — IF: 8.00.
13. **T. Lazebnik**, L. Simon-Keren, Cancer-inspired Genomics Mapper Model for the Generation of Synthetic DNA Sequences with Desired Genomics Signatures. 2023. - Q: 1 - Health information, Computer science applications — IF: 7.7.
14. A. Alexi, A. Rosenfeld, **T. Lazebnik**, Multi-Species Prey-Predator Dynamics During a Multi-Strain Pandemic. *Chaos: An Interdisciplinary Journal of Nonlinear*. 2023. - Q: 1 - Mathematical physics, Physics and astronomy, 2 - Applied mathematics, Medicine, Statistical and nonlinear physics — IF: 3.741.
15. N. Vardi, **T. Lazebnik**, The Causal Role of Lockdowns in COVID-19: Conclusions from Daily Epidemiological, Psychological, and Sociological Data. *Psychiatric Quarterly*. 2023. - Q: 1 - Psychiatry and mental health — IF: 3.5
16. **T. Lazebnik**, Computational Applications of Extended SIR Models: A Review Focused on Airborne Pandemics. 2023. *Ecological Modelling*. - Q: 1 - Ecology, 2 - Ecological Modeling — IF: 3.512
17. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, A. Kiselyov, Mathematical Model for BCG-based Treatment Of Type 1 Diabetes. *Physica A: Statistical Mechanics and its Applications*. 2023. - Q: 2 - Condensed Matter Physics, Statistical and Nonlinear Physics, Statistics and Probability — IF: 3.778
18. Y. Herskowitz, S. Bunimovich-Mendrazitsky, **T. Lazebnik**, Mathematical Model Of Coffee Tree's Rast Control Using Snails As Biological Agents. *Biosystems*. 2023. - Q: 2 - Applied Mathematics, Modeling and Simulations — IF: 1.957
19. D. Krongauz, **T. Lazebnik**, Collective Evolution Learning Model for Vision-Based Collective Motion with Collision Avoidance. *Plos One*. 2023. - Q: 1 - Multidisciplinary — IF: 3.752
20. A. Alexi, **T. Lazebnik**, L. Shami, Micro-Founded Tax Revenue Forecast Model In a Supply-Demand Based Economy with Heterogeneous Population. *Computational Economics*. 2023. - Q: 2 - Economics, Econometrics and Finance, 3 - Computer Science Applications — IF: 1.741

21. **T. Lazebnik**, A. Rosenfeld, FSPL: Filter and Embedding Feature Selection Pipeline Meta Learning. Applied Mathematics and Computer Science. 2023. - Q: 2 - Applied Mathematics, Computer Science, Engineering — IF: 2.157
22. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, Decision Tree Post-Pruning Without Loss Of Accuracy using the SAT-PP algorithm with an Empirical Evaluation on Clinical Data. Data & Knowledge Engineering. 2023. - Q: 2 - information systems and management — IF: 1.500
23. **T. Lazebnik**, L. Shami, S. Bunimovich-Mendrazitsky, Intervention Policy Influence on the Effect of Epidemiological Crisis on Industry-Level Production Through Input-Output Networks. Socio-Economic Planning Sciences. 2023. - Q: 1 - Economics and Econometrics, Statistics, probability and uncertainty, strategy and management — IF: 4.641
24. A. Yaniv-Rosenfeld, E. Savchenko, A. Rosenfeld, **T. Lazebnik**, Personalized Scheduling of BCG Injection Treatment for Bladder Cancer Patients. Mathematics. 2023. - Q: 2 - Computer science, engineering, mathematics — IF: 2.592
25. L. Shami, **T. Lazebnik**, Implementing Machine Learning Methods in Estimating the Size of the Non-Observed Economy. Computational Economics. 2023. - Q: 2 - Economics, econometrics and finance, 3 - Computer Science Applications — IF: 1.741
26. L. Shami, **T. Lazebnik**, Financing and managing epidemiological-economic crises: Are we ready for another outbreak?. Journal of Policy Modeling. 2023. - Q: 2 - Economics and econometrics — IF: 2.727
27. **T. Lazebnik**, A. Somech, A. Itzhak-Weinberg, SubStrat: Faster AutoML with Measure-Preserving Data Subsets. International Conference on Very Large Data Bases (VLDP). 2023. - IF: 4.243
28. L. Simon-Keren, A. Liberson, **T. Lazebnik**, A Computational Framework For Physics-Informed Symbolic Regression with Straightforward Integration of Domain Knowledge. Scientific Reports. 2023. - Q: 1 - Multidisciplinary — IF: 4.997
29. **T. Lazebnik**, A. Alexi, High Resolution Mathematical Model for Airborne Pandemic Spread Indoors. Mathematics. 2023. - Q: 2 - Computer science, engineering, mathematics — IF: 2.592
30. **T. Lazebnik**, U. Itai, Bounding Pandemic Spread By Heat Spread. Journal of Engineering Mathematics. 2023. - Q: 2 - Engineering, 3 - Mathematics — IF: 1.444
31. A. Alexi, A. Rosenfeld, **T. Lazebnik**, A Security Games Inspired Approach for Distributed Controlling Of Pandemic Spread. Advanced Theory and Simulations. 2022. - Q: 1 - Modeling and simulations, multidisciplinary, numerical analysis, 2 - Statistics and Probability — IF: 4.105
32. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, S. Ashkenazi, E. Levner, A. Benis, Early Detection and Control of the Next Epidemic Wave using Health Communications: Development of an Artificial Intelligence-based Tool and its Validation on COVID-19 Data from the US. International Journal of Environmental Research and Public Health. 2022. - Q: 2 - Pollution, Health toxicology and mutagenesis, public health — IF: 4.614
33. Y. A. Veturi, W. Woof, **T. Lazebnik**, I. Moghul, P. Woodward-Court, S. K. Wagner, T. A. C. de Guimarães, M. D. Varela, B. Liefers, S. Beck, A. R. Webster, O. Mahroo, P. A. Keane, M. Michaelides, K. Balaskas, N. Pontikos, SynthEye: Investigating the impact of synthetic data on AI-assisted gene diagnosis of Inherited Retinal Disease. Ophthalmology Science. 2022. - IF: NA
34. A. Alexi, A. Rosenfeld, **T. Lazebnik**, The Trade-off Between Airborne Pandemic Control and Energy Consumption Using Air-Ventilation Solutions. Sensors. 2022. - Q: 1 - Analytical chemistry, instrumentation, 2 - atomic and molecular physics and optics, biochemistry, electrical and electronic engineering, medicine — IF: 3.847
35. L. Shami, **T. Lazebnik**, Economic Aspects of the Detection of New Strains in a Multi-Strain Epidemiological Mathematical Model. Chaos, Solitons & Fractals. 2022. - Q: 1 - Applied mathematics,

mathematical physics, mathematics, physics and astronomy, statistical and nonlinear physics — IF: 9.922

36. **T. Lazebnik**, Cell-level Spatio-Temporal Model for Bacillus Calmette-Guerin Based Immunotherapy Treatment Protocol of Superficial Bladder Cancer. *Cells*. 2022. - Q: 1 - Biochemistry, Genetics and Molecular Biology — IF = 7.666
37. T. Gargantini, M. Daly, J. Sherlock, **T. Lazebnik**. Providing Safe Space for Honest Mistakes in the Public Sector Is The Most Important Predictor For Work Engagement After Strategic Clarity. Sustainability. 2022. - Q: 1 - Geography planning and development, 2 - computer networks and communications, energy engineering and power technology, environmental science — IF = 3.889
38. **T. Lazebnik**, Z. Bahouth, S. Bunimovich-Mendrazitsky, S. Halachmi, Predicting Acute Kidney Injury Following Open Partial Nephrectomy Treatment Using SAT-Pruned Explainable Machine Learning Model. *BMC Medical Informatics and Decision Making*. 2022.- Q: 1 -Health policy, 2 - Computer science, health informatics — IF = 3.298
39. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, Generic Approach For Mathematical Model of Multi-Strain Pandemics. *Plos One*. 2022. - Q: 1 - Multidisciplinary — IF: 3.752
40. S. Natan, **T. Lazebnik**, E. Lerner, A distinction of three online learning pedagogic paradigms. *SN Social Science*. 2022. - NA
41. Z. Zemah-Shamir, S. Zemah-Shamir, A. Scheinin, D. Tchernov, **T. Lazebnik**, G. Gal, A review of the behavioural changes and physiological adjustments of elasmobranchs and teleost's to ocean acidification with a focus on sharks. *Fishes*. 2022. - Q: 2 - Aquatic science, ecology, ecology evolution behaviour and systematics — IF: 3.170
42. **T. Lazebnik**, G. Blumrosen, Advanced Muti-Mutation with Intervention Policies Pandemic Model. *IEEE Access*. 2022. - Q: 1 - Computer science, engineering, materials science — IF: 3.476
43. E. Savchenko, **T. Lazebnik**, Computer Aided Functional Style Identification and Correction In Modern Russian Texts. *Journal of Data, Information and Management*. 2022. - NA
44. **T. Lazebnik**, A. Alexi, Comparison of Pandemic Intervention Policies in Several Building Types Using Heterogeneous Population Model. *Communications in Nonlinear Science and Numerical Simulation*. 2022. - Q: 1 - applied mathematics, modelling and simulation, numerical analysis — IF: 4.186
45. **T. Lazebnik**, L. Shami, S. Bunimovich-Mendrazitsky, Pandemic Management by a Spatio-temporal Mathematical Model. *International Journal of Nonlinear Sciences and Numerical Simulation*. 2021. - Q: 2 - computation mechanics, engineering, 3 - applied mathematics, modeling and simulations, statistical and nonlinear physics — IF: 2.156
46. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, L. Shaikhet, Novel Method to Analytically Obtain the Asymptotic Stable Equilibria States of Extended SIR-type Epidemiological Models. *Symmetry*. 2021. - Q: 2 - chemistry, computer science, mathematics, physics and astronomy — IF: 2.940
47. **T. Lazebnik**, L. Shami, S. Bunimovich-Mendrazitsky, Spatio-Temporal Influence of Non-Pharmaceutical Interventions Policies on Pandemic Dynamics and the Economy: The Case of COVID-19. *Economic Research-Ekonomska Istrazivanja*. 2021. - Q: 2 - economics and econometrics — IF: 3.080
48. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, The signature features of COVID-19 pandemic in a hybrid mathematical model - implications for optimal work-school lockdown policy. *Advanced Theory and Simulations*. 2021. - Q: 1 - Modeling and simulations, multidisciplinary, numerical analysis, 2 - Statistics and Probability — IF: 4.105
49. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, N. Aaroni, PDE based geometry model for BCG immunotherapy of bladder cancer. *Biosystems*. 2020. - Q: 2 - Applied Mathematics, Modeling and Simulations — IF: 1.957

Articles in Refereed Conferences

1. **T. Lazebnik**, A. Somech, Demonstrating SubStrat: A Subset-Based Strategy for Faster AutoML on Large Datasets. Conference on Information and Knowledge Management (CIKM). 2022.
2. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, Improved Geometric Configuration for the Bladder Cancer BCG-based Immunotherapy Treatment Model. ISMCO. 2021.

Manuscripts Submitted / Under Review

1. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, More Numerically Accurate Algorithm For Matrix Exponential.
2. **T. Lazebnik**, H. Weitman, Y. Goldberg, G. A. Kaminka, Rivendell: Project-Based Academic Search Engine.
3. **T. Lazebnik**, A. Rosenfeld, A New Definition For Feature Selection Stability Analysis.
4. N. Cohen, **T. Lazebnik**, Agent-Based Simulation of Street-Level Bureaucrats' Prosocial Tendencies in the Traditional, NPM, and Post-NPM Approaches to Public Administration.
5. L. Shami, **T. Lazebnik**, O. Akirev, Analysis of the Optimal Number of Ministers: The Case of Israel.
6. **T. Lazebnik**, Cost-optimal Seeding Strategy During a Botanical Pandemic in Domesticated Fields.
7. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, Predicting the location of metastases of lung cancer using the location of the original location.
8. **T. Lazebnik**, A. Rosenfeld, How Academic Collaborations Influence Authors' Writing Style.
9. **T. Lazebnik**, L. Simon-Keren, Knowledge-integrated AutoEncoder Model.
10. **T. Lazebnik**, L. Shami, A. Alexi, A. Rosenfeld, Economical-Epidemiological Analysis of the Coffee Trees Rust Pandemic.
11. N. Cohen, M. Davidovich, **T. Lazebnik**, Trust and Street-Level Bureaucrats' Perceptions about Organizational Readiness for Emergencies.
12. **T. Lazebnik**, The Family Tree Graph as a Predictor of the Family Members' Satisfaction with One Another.
13. L. Shami, **T. Lazebnik**, Nash and Trading Equilibria in a Public Good Economy with Finite Number of Private and Public Goods and Asymmetrical Agents.
14. **T. Lazebnik**, O. Iny, Temporal Graphs Anomaly Emergence Detection: Benchmarking For Social Media Interactions.
15. A. Alexi, **T. Lazebnik**, A. Rosenfeld., The Scientometrics and Reciprocity Underlying Co-Authorship Panels in Google Scholar Profiles.
16. A. Rosenfeld, A. Alexi, L. Mushiev, **T. Lazebnik**, The Academic Midas Touch: An Unconventional Scientometric for Evaluating Academic Excellence.
17. A. Fenster, **T. Lazebnik**, Mathematical Model of Dating Apps' Influence on Sexually Transmitted Diseases Spread Dynamics.
18. **T. Lazebnik**, O. Spiegel, Individual Variation Affects Outbreak Magnitude and Predictability in an Extended Multi-Pathogen SIR Model of Pigeons Visiting Dairy Farms.
19. **T. Lazebnik**, Going a Step Deeper Down the Rabbit Hole: Deep Learning Model to Measure the Size of the Unregistered Economy.
20. A. Shmuel, **T. Lazebnik**, O. Glickman, Symbolic Regression as Feature Engineering Method for Machine and Deep Learning Regression Tasks.

21. N. Vardi, **T. Lazebnik**, M. Bar, Data-Driven Welfare Indicators for Sheltered Dogs using Telemetry and Signal Processing.
22. T. Travain, **T. Lazebnik**, A. Zamansky, S. Cafazzo, P. Valsecchi, E. Natoli, Data-Driven Welfare Indicators for Sheltered Dogs using Telemetry and Signal Processing.
23. M. Glebov, **T. Lazebnik**, B. Orkin, H. Berkenstadt, S. Bunimovich-Mendrazitsky, Predicting Post-operative Nausea And Vomiting Using Machine Learning: A Model Development and Validation Study.
24. **T. Lazebnik**, Y. Golov, R. Gurka, A. Harari, A. Liberson, Exploration-Exploitation Model of Moth-Inspired Olfactory Navigation.
25. G. Martvel, **T. Lazebnik**, M. Feigelstein, L. Henze, S. Meller, I. Shimshoni, F. Twele, A. Schütter, N. Dorn, S. Kastner, L. Finka, S. P. L. Luna, D. S. Mills, H. A. Volk, A. Zamansky, Automated Pain Recognition in Cats using Facial Landmarks: Dynamics Matter.
26. Automated Landmark-Based Cat Facial Analysis and its Applications. T. Martvel, **T. Lazebnik**, M. Feigelstein, S. Meller, I. Shimshoni, L. Finka, S. Luna, D. Mills, H. A. Volk, A. Zamansky.
27. R. Peleg, **T. Lazebnik**, A. Hoogi. Fast-Adaptive Moment Estimation with Finance-Inspired Triple Exponential Moving Average.
28. **T. Lazebnik**. Genetic algorithm during concept drift learning - suggest a new cool genetic algorithm approach to online learning while concept drift happens.
29. **T. Lazebnik**, A. Rosenfeld, Detecting LLM-Assisted Writing in Scientific Communication: Are We There Yet?.
30. L. Shami, **T. Lazebnik**, Got much, got nothing: Analyzing the impact of increased special interest groups' influence on utility.
31. A. Shmual, **T. Lazebnik**, O. Glickman, E. Heifetz, C. Price, Lightning-Ignited Wildfires On A Global Scale: Prediction and Climate Change Projections based on Explainable Machine Learning Models.

Grants received

1. "Implementation of artificial intelligence methods to improve early detection of disease outbreaks, public responses, prevention and management", 15000 NIS - received 4000 NIS.
2. "Impact of climate change on ecosystem services in the Gulf of Eilat - Environmental-economic assessment", 449880 NIS - received 22500 NIS.

Editorial work

1. **Journal:** Cells. **Position:** Guest editor of a special issue entitled "Cell-Cell Interaction Modelling of Cancer Immunotherapy Treatments", 1.2022 - 2.2023.
2. **Journal:** Frontiers in Applied Mathematics and Statistics. **Position:** Review editor, 12.2022 - now.

Conference Talks

1. **Subject:** Simon-Keren, L., **Lazebnik, T.**, Liberzon, A., Predictive correlations for particle motion across a stratified interface using machine learning .
Conference: The 14th International ERCOFTAC symposium on Engineering, Turbulence, Modelling and Measurements, 09.2023.
2. **Subject:** **Lazebnik, T.**, Using ML models in infectious diseases prediction with economical constraints.
Conference: AI2 - medicine in the AI Era, 05.2023.

3. **Subject:** **Lazebnik, T.** and Bunimovich-Mendrazitsky, S., Extended Mathematical Model for the BCG-based Treatment of Type 1 Diabetes.
Conference: Dynamical Systems Applied To Biology And Natural Science, 02.2023.
4. **Subject:** **Lazebnik, T.** and Bunimovich-Mendrazitsky, S., Mathematical Model for the BCG-based Treatment of Type 1 Diabetes.
Conference: Dynamical Systems Applied To Biology And Natural Science, 02.2022.
5. **Subject:** Shami, L. and **Lazebnik, T.**, Financing and Managing Epidemiological-Economic Crisis: The Reserve Model.
Conference: ICEA, Public Policy Lessons conference, 11.2021.
6. **Subject:** **Lazebnik, T.**, Shami, L., and Bunimovich-Mendrazitsky, S., Epidemiological-Economical Pandemic Management By A Spatio-Temporal Mathematical Model.
Conference: Dynamical Systems Applied To Biology And Natural Science, 02.2021.

LANGUAGES

- **Hebrew:** Native.
- **Russian:** Native.
- **English:** Full professional proficiency.