

TEDDY LAZEBNIK

Last update: 16.4.2024

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).

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, 2023-2024 (co-advisor 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 (co-advisor with Prof. Svetlana Bunimovich-Mendrazitsky).

P.hD. students

- Ariel University, Adi Shuchami, 2024-current.
- Bar Ilan University, Dr. Assaf Shmuel, 2023-current (co-advisor with Dr. Oen Glickman).

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. **T. Lazebnik**, L. Simon-Keren, Knowledge-integrated AutoEncoder Model. Expert Systems With Applications. 2024. (Accepted) - Q: 1 - Artificial Intelligence, Computer Science Applications, Engineering — IF: to-be-published for 2024.
2. **T. Lazebnik**, Y. Golov, R. Gurka, A. Harari, A. Liberson, Exploration-Exploitation Model of Moth-Inspired Olfactory Navigation. Journal of the Royal Society Interface. 2024. (Accepted) - Q: 1 - Biochemistry, Bioengineering, Biomedical Engineering, Biophysics, Biotechnology; 2 - Biomaterials — IF: to-be-published for 2024.
3. A. Alexi, **T. Lazebnik**, A. Rosenfeld., The Scientometrics and Reciprocity Underlying Co-Authorship Panels in Google Scholar Profiles. Scientometrics. 2024. (Accepted) - Q: 1 - Computer Science Applications, Library and Information Sciences, Social Sciences — IF: to-be-published for 2024.
4. **T. Lazebnik**, Going a Step Deeper Down the Rabbit Hole: Deep Learning Model to Measure the Size of the Unregistered Economy. Computational economics. 2024. - Q: 2 - Economics, 3 - computer scienceapplications — IF: to-be-published for 2024.
5. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, More Numerically Accurate Algorithm For Matrix Exponential. Mathematics. 2024. (Accepted) - Q: 2 - Computer Science, Engineering, Mathematics — IF: to-be-published for 2024.

6. **T. Lazebnik**, Cost-optimal Seeding Strategy During a Botanical Pandemic in Domesticated Fields. *Chaos: an interdisciplinary journal of nonlinear science*. 2024. - Q: 1 - Mathematical Physics, Physics and Astronomy, 2 - Applied Mathematics, Medicine, Statistical and Nonlinear Physics — IF: to-be-published for 2024.
7. **T. Lazebnik**, A. Rosenfeld, A New Definition For Feature Selection Stability Analysis. (Accepted). *Annals of Mathematics and Artificial Intelligence*. 2024. - Q: 3 - Applied Mathematics, Artificial Intelligence — IF: to-be-published for 2024.
8. T. Travain, **T. Lazebnik**, A. Zamansky, S. Cafazzo, P. Valsecchi, E. Natoli, Environmental enrichments and data-driven welfare indicators for sheltered dogs using telemetric physiological measures and signal processing. *Scientific Reports*. 2024. - Q: 1 - Multidisciplinary — IF: to-be-published for 2024
9. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, A. Rosenfeld, An Algorithm to Optimize Explainability using Feature Ensembles. *Applied Intelligence*. 2024. - Q: 2 - AI — IF: 5.019
10. 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. - Q: 1 -Veterinary — IF = to-be-published for 2024
11. 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. - Q: 1 - Fluid Flow and Transfer Processes, Mechanical Engineering, Physics and Astronomy — IF: to-be-published for 2024
12. **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
13. 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
14. 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
15. A. Oren, J. D. Turkcu, 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. - Q: 1 - Multidisciplinary — IF: 4.997
16. **T. Lazebnik**, D. Gorfitsky, 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
17. **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
18. 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.
19. **T. Lazebnik**, T. Fleischer, A. Yaniv-Rosenfeld, Benchmarking Biologically-inspired Automatic Machine Learning for Economic Tasks. *Sustainability*. 2023. - Q: 1 - Geography planning and development, 2 - computer networks and communications, energy engineering and power technology, environmental science — IF = 3.889
20. **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.

21. **T. Lazebnik**, L. Simon-Keren, Cancer-inspired Genomics Mapper Model for the Generation of Synthetic DNA Sequences with Desired Genomics Signatures. *Computers in Biology and Medicine*. 2023. - Q: 1 - Health information, Computer science applications — IF: 7.7.
22. 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.
23. 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
24. **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
25. 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
26. 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
27. 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
28. **T. Lazebnik**, A. Rosenfeld, FSPL: A meta-learning approach for a filter and embedded feature selection pipeline. *Applied Mathematics and Computer Science*. 2023. - Q: 2 - Applied Mathematics, Computer Science, Engineering — IF: 2.157
29. **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
30. **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
31. A. Yaniv-Rosenfeld, E. Savchenko, A. Rosenfeld, **T. Lazebnik**, Scheduling BCG and IL-2 Injections for Bladder Cancer Immunotherapy Treatment. *Mathematics*. 2023. - Q: 2 - Computer science, engineering, mathematics — IF: 2.592
32. 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
33. 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
34. 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

35. **T. Lazebnik**, A. Alexi, High Resolution Mathematical Model for Airborne Pandemic Spread Indoors. *Mathematics*. 2023. - Q: 2 - Computer science, engineering, mathematics — IF: 2.592
36. **T. Lazebnik**, U. Itai, Bounding Pandemic Spread By Heat Spread. *Journal of Engineering Mathematics*. 2023. - Q: 2 - Engineering, 3 - Mathematics — IF: 1.444
37. 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
38. **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
39. 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
40. 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
41. 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
42. **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
43. 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
44. **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
45. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, Generic Approach For Mathematical Model of Multi-Strain Pandemics. *Plos One*. 2022. - Q: 1 - Multidisciplinary — IF: 3.752
46. S. Natan, **T. Lazebnik**, E. Lerner, A distinction of three online learning pedagogic paradigms. *SN Social Science*. 2022. - NA
47. Z. Zemah-Shamir, S. Zemah-Shamir, A. Scheinin, D. Tchernov, **T. Lazebnik**, G. Gal, A Systematic 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
48. **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

49. E. Savchenko, **T. Lazebnik**, Computer Aided Functional Style Identification and Correction In Modern Russian Texts. Journal of Data, Information and Management. 2022. - NA
50. **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
51. **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
52. **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
53. **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-Ekonomika Istrazivanja. 2021. - Q: 2 - economics and econometrics — IF: 3.080
54. **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
55. **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

Review Articles

1. **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

Articles in Refereed Conferences

1. **T. Lazebnik**, A. Somech, Demonstrating SubStrat: A Subset-Based Strategy for Faster AutoML on Large Datasets. International Conference on Very Large Data Bases (VLDP). 2023.
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**, H. Weitman, Y. Goldberg, G. A. Kaminka, Rivendell: Project-Based Academic Search Engine.
2. N. Cohen, **T. Lazebnik**, Agent-Based Simulation of Street-Level Bureaucrats' Prosocial Tendencies in the Traditional, NPM, and Post-NPM Approaches to Public Administration.
3. L. Shami, **T. Lazebnik**, O. Akirev, Analysis of the Optimal Number of Ministers: The Case of Israel.
4. **T. Lazebnik**, S. Bunimovich-Mendrazitsky, Predicting the location of metastases of lung cancer using the location of the original location.
5. **T. Lazebnik**, A. Rosenfeld, How Academic Collaborations Influence Authors' Writing Style.
6. **T. Lazebnik**, L. Shami, A. Alexi, A. Rosenfeld, Economical-Epidemiological Analysis of the Coffee Trees Rust Pandemic.

7. N. Cohen, M. Davidovich, **T. Lazebnik**, Trust and Street-Level Bureaucrats' Perceptions about Organizational Readiness for Emergencies.
8. **T. Lazebnik**, The Family Tree Graph as a Predictor of the Family Members' Satisfaction with One Another.
9. L. Shami, **T. Lazebnik**, Nash and Trading Equilibria in a Public Good Economy with Finite Number of Private and Public Goods and Asymmetrical Agents.
10. **T. Lazebnik**, O. Iny, Temporal Graphs Anomaly Emergence Detection: Benchmarking For Social Media Interactions.
11. A. Rosenfeld, A. Alexi, L. Mushiev, **T. Lazebnik**, The Academic Midas Touch: An Unconventional Scientometric for Evaluating Academic Excellence.
12. A. Fenster, **T. Lazebnik**, Mathematical Model of Dating Apps' Influence on Sexually Transmitted Diseases Spread Dynamics.
13. **T. Lazebnik**, O. Speigel, Individual Variation Affects Outbreak Magnitude and Predictability in an Extended Multi-Pathogen SIR Model of Pigeons Visiting Dairy Farms.
14. A. Shmuel, **T. Lazebnik**, O. Glickman, Symbolic Regression as Feature Engineering Method for Machine and Deep Learning Regression Tasks.
15. N. Vardi, **T. Lazebnik**, M. Bar, Data-Using Machine Learning to Evaluate Ruminative Thinking From Associative Responses.
16. 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.
17. G. Martvel, **T. Lazebnik**, M. Feighelstein, 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.
18. Automated Landmark-Based Cat Facial Analysis and its Applications. T. Martvel, **T. Lazebnik**, M. Feighelstein, S. Meller, I. Shimshoni, L. Finka, S. Luna, D. Mills, H. A. Volk, A. Zamansky.
19. R. Peleg, **T. Lazebnik**, A. Hoogi. Fast-Adaptive Moment Estimation with Finance-Inspired Triple Exponential Moving Average.
20. **T. Lazebnik**. Pulling the Carpet Below the Learner's Feet: Genetic Algorithm To Learn Ensemble Machine Learning Model During Concept Drift.
21. **T. Lazebnik**, A. Rosenfeld, Detecting LLM-Assisted Writing in Scientific Communication: Are We There Yet?.
22. L. Shami, **T. Lazebnik**, Got much, got nothing: Analyzing the impact of increased special interest groups' influence on utility.
23. 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.
24. G. Martvel, L. Scott, B. Florkiewicz, A. Zamansky, I. Shimshoni, **T. Lazebnik**, AI for Feline Faces: A Computational Investigation of the Social Function of Domestic Cat Facial Signals.
25. O. Edri-Peer, **T. Lazebnik**, N. Cohen, Which People Obey the Law? A Decision Tree Model for Profiling Vigilantes.
26. **T. Lazebnik**, A. Rosenfeld, Whose LLM is it Anyway? Linguistic Comparison and LLM Attribution for GPT-3.5, GPT-4 and Bard.

27. **T. Lazebnik**, Transforming Norm-based To Graph-based Spatial Representation for Spatio-Temporal Epidemiological Models.
28. M. Levi, **T. Lazebnik**, S. Kushnir, N. Yosef, D. Shlomi, Machine Learning Computational Model to predict Lung Cancer Using Electronic Medical Records.
29. L. Schwartz, N. Matania, M. Levi, **T. Lazebnik**, S. Kushnir, N. Yosef, A. Hoogi, D. Shlomi, Machine Learning Computational Model to Predict Lung Cancer Using Electronic Medical Records.
30. B. Norton, A. Zamansky, B. Florkiewicz, **T. Lazebnik**, The Art of Chimpanzee Diplomacy: Unraveling the Secrets of Successful Negotiations Using AI.

Grants received

1. "Incidence and risk factors for recurrent urinary tract infection in children caused by bacilli ESBL", 12500 NIS - received 7500 NIS.
2. "Implementation of artificial intelligence methods to improve early detection of disease outbreaks, public responses, prevention and management", 15000 NIS - received 4000 NIS.
3. "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:** Lazebnik, T., Shami, L., Got much, got nothing: Analyzing the impact of increased special interest groups' influence on utility.
Conference: The 47th Eurasia Business and Economics Society conference, 04.2024.
2. **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.
3. **Subject:** Lazebnik, T., Using ML models in infectious diseases prediction with economical constraints.
Conference: AI2 - medicine in the AI Era, 05.2023.
4. **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.
5. **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.
6. **Subject:** Shami, L. and Lazebnik, T., Financing and Managing Epidemiological-Economic Crisis: The Reserve Model.
Conference: ICEA, Public Policy Lessons conference, 11.2021.
7. **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.