Nikos Zarifis

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EDUCATION

University of Wisconsin-Madison   Aug 2019 - now
Ph.D. in Computer Sciences
Advisor: Ilias Diakonikolas

National Technical University of Athens   Sep 2012 - Nov 2018
Diploma in Electrical and Computer Engineering
Major: Computer Science Minor: Mathematics
Advisor: Dimitris Fotakis

RESEARCH INTERESTS

Foundations of Machine Learning

PUBLICATIONS*

*Ordering in publications is alphabetical by convention in Theoretical Computer Science/Learning Theory.

Learning a Single Neuron with Adversarial Label Noise via Gradient Descent with I. Diakonikolas, V. Kontonis, C. Tzamos (**COLT 2022**)

Learning General Halfspaces with Adversarial Label Noise via Online Gradient Descent with I. Diakonikolas, V. Kontonis, C. Tzamos (**ICML 2022**)

Learning General Halfspaces with General Massart Noise under the Gaussian Distribution with I. Diakonikolas, D. M. Kane, V. Kontonis, C. Tzamos (**STOC 2022**)

Agnostic Proper Learning of Halfspaces under Gaussian Marginals with I. Diakonikolas, D. M. Kane, V. Kontonis, C. Tzamos (**COLT 2021**)

The Optimality of Polynomial Regression for Agnostic Learning under Gaussian Marginals with I. Diakonikolas, D. M. Kane, T. Pittas (**COLT 2021**)

Learning Online Algorithms with Distributional Advice with I. Diakonikolas, V. Kontonis, C. Tzamos, A. Vakilian (**ICML 2021**)

A Polynomial Time Algorithm for Learning Halfspaces with Tsybakov Noise with I. Diakonikolas, D. M. Kane, V. Kontonis, C. Tzamos (**STOC 2021**)

Learning Halfspaces with Tsybakov Noise with I. Diakonikolas, V. Kontonis, C. Tzamos (**STOC 2021**). Conference version merged with paper above

Near-Optimal SQ Lower Bounds for Agnostically Learning Halfspaces and ReLUs under Gaussian Marginals with I. Diakonikolas, D. M. Kane (**NeurIPS 2020**)

Non-Convex SGD Learns Halfspaces with Adversarial Label Noise with I. Diakonikolas, V. Kontonis, C. Tzamos (**NeurIPS 2020**)

Algorithms and SQ Lower Bounds for PAC Learning One-Hidden-Layer ReLU Networks with I. Diakonikolas, D. M. Kane, V. Kontonis (**COLT 2020**)

Learning Halfspaces with Massart Noise under Structured Distributions with I. Diakonikolas, V. Kontonis, C. Tzamos (**COLT 2020**)

Reallocating Multiple Facilities on the Line with D. Fotakis, L. Kavouras, P. Koutsopanagiotis, P. Lazos, S. Skoulakis (**TCS 2021**)

COLT: Conference on Learning Theory, **ICML**: International Conference on Machine Learning, **NeurIPS**: Advances in Neural Information Processing Systems, **STOC**: ACM Symposium on Theory of Computing, **TCS**: Theoretical Computer Science (Journal)

AWARDS

2019-Present
2022: Bodossaki Foundation Fellowship
2021: Outstanding Reviewer Award (NeurIPS 2021): Top 8%
2020: Gerondellis Foundation Fellowship
2012-2018, National Technical University of Athens
2014: South Eastern European Mathematical Olympiad for University Students (SEEMOUS) 2014: Gold Medal (Rank: 3rd) & Member of Greek National Team (after internal competition)
2013: South Eastern European Mathematical Olympiad for University Students (SEEMOUS) 2013: Silver Medal (Rank: 11th)
2012-2013: Papakyriakopoulos award for excellence in Mathematics

TEACHING EXPERIENCE

Teaching Assistant, UW-Madison
CS760: "*Machine Learning*"	Fall 2022
CS540: "*Introduction to Artificial Intelligence*"	Spring 2022
CS639: "*Intro to Computational Learning Theory*"	Fall-Spring 2020
CS300: "*Introduction to Programming II*"	Fall 2019

Teaching Assistant, NTUA
"Introduction to Computer Programming"	Fall 2013-2019
"Discrete Mathematics"	Spring 2018
"Algorithms and Complexity"	Fall 2017-2019

SERVICE

Conference Reviewer
Neural Information Processing Systems (NeurIPS): 2022, 2021
Conference on Learning Theory (COLT): 2022
Journal Reviewer
Theoretical Computer Science (TCS): 2022
Transactions on Machine Learning Research (TMLR): 2022

TECHNICAL SKILLS

C++, Python, Java, Mathematica, LaTeX, Linux

LANGUAGES

English (fluent), **Greek** (native)