

Lydia Zakyntinou

Curriculum Vitae

*Khoury College of Computer Sciences, Northeastern University
Interdisciplinary Science and Engineering Complex #660
805 Columbus Avenue, Boston, MA 02118
✉ zakyntinou.l@northeastern.edu*

Research interests: Theory of Machine Learning and Data Privacy

Education

- Sept. 2017–
now **PhD in Computer Science**, *Northeastern University*, Khoury College of Computer Sciences.
Advisors: Huy Lê Nguyễn and Jonathan Ullman
GPA: 3.917
- March 2015–
Sept. 2017 **Graduate Program in Logic, Algorithms, and Computation (MPLA)**, *University of Athens*,
Department of Mathematics, Greece.
GPA: 9.93/10
Thesis: “Online Facility Location with Switching Costs”
Advisor: Dimitris Fotakis
- Sept. 2008–
March 2015 **Diploma in Electrical and Computer Engineering**, *National Technical University of Athens*,
School of Electrical and Computer Engineering, Greece.
GPA: 8.28/10
Thesis: “The Multiplicative Weights Update Method in Mechanism Design”
Advisor: Dimitris Fotakis

Research Experience

- June 2019–
August 2019 **Research Intern**, *IBM Research - Almaden*, San Jose, California, USA.
Mentor: Thomas Steinke

Publications

Efficient Private Algorithms for Learning Halfspaces.

Huy Lê Nguyễn, Jonathan Ullman, Lydia Zakyntinou
31st International Conference on Algorithmic Learning Theory, San Diego, USA, 2020.
<https://arxiv.org/abs/1902.09009>

Improved Algorithms for Collaborative PAC Learning.

Huy Lê Nguyễn and Lydia Zakyntinou
In *Advances in Neural Information Processing Systems 31*, NeurIPS'18, pages 7642–7650, Montréal, Canada, 2018. Curran Associates, Inc.
<https://papers.nips.cc/paper/7990-improved-algorithms-for-collaborative-pac-learning>

Preprints

Reasoning About Generalization via Conditional Mutual Information.

Thomas Steinke and Lydia Zakyntinou
Manuscript, 2020.
<https://arxiv.org/abs/2001.09122>

Private Identity Testing for High-Dimensional Distributions.

Clément L. Cannone, Gautam Kamath, Audra McMillan, Jonathan Ullman, Lydia Zakyntinou
Manuscript, 2019.
<https://arxiv.org/abs/1905.11947>

Teaching Experience

- Fall '18 **Algorithms and Data (CS3000)**, *Instructor: Jonathan Ullman*, Northeastern University,
Undergraduate.
Teaching Assistant

- Spring '15–'17 **Introduction to Computer Science**, *Instructors: Aris Pagourtzis, Stathis Zachos*, NTUA, Undergraduate.
Grader
- Fall '14–'16 **Computer Programming**, *Instructors: Stathis Zachos, Dimitris Fotakis, Nikolaos Papaspyrou*, NTUA, Undergraduate.
Lab Instructor
- Fall '14–'16 **Algorithms and Complexity**, *Instructor: Dimitris Fotakis*, NTUA, Undergraduate.
Teaching Assistant
- Spring '15–'16 **Algorithms and Complexity**, *Instructor: Dimitris Fotakis*, NTUA, Graduate.
Teaching Assistant
- Spring '16 **Algorithmic Game Theory**, *Instructor: Dimitris Fotakis*, NTUA, Graduate.
Teaching Assistant
- Spring '15 **Social Networks**, *Instructor: Dimitris Fotakis*, NTUA, Graduate.
Teaching Assistant

Talks

Private Identity Testing for High-Dimensional Distributions, *New York Colloquium on Algorithms and Complexity*, CUNY, November 2019.

Private Identity Testing for High-Dimensional Distributions, *Workshop on Algorithms in Learning and Economics*, Rhodes, Greece, July 2019.

Collaborative PAC Learning, *Signal Processing, Imaging, Reasoning, and Learning (SPIRAL) Group*, Northeastern University, February 2019.

Honors & Awards

- 2020 **Facebook Fellowship**, Merit-based award covering full stipend, tuition, and conference travel for two academic years.
- 2017 **Graduate Fellowship**, *Khoury College of Computer Sciences, Northeastern University*, Merit-based award covering full stipend and tuition for one academic year.
- 2017 **First Honor in the Graduate Program in Logic, Algorithms, and Computation**, *University of Athens*, for highest GPA in the class of 2017.
- 2008 **Eurobank “The Great Moment for Education” Fellowship**, Merit-based award rewarding one top graduate from every high school in Greece based on their score in the nationwide examination.
- 2008 **Ministry of Education’s Commendation Certificate for Academic Performance**, for highest GPA in high school.

Programming skills

- Advanced \LaTeX , C
- Intermediate R, MATLAB, Python
- Basic Java, Prolog, Haskell, ML, PHP, HTML, CSS

Languages

- Greek native speaker
- English fluent
- French very good command

TOEFL: 117/120, GRE: 162V / 168Q / 4.0W
Diplôme B2, Institut Français d’Athènes

Interests & Misc.

- Organizer for the Theory Seminar and Khoury PhD Women Group at Northeastern University (Spring 2019 - now)
- Head of Academic Activities for the 6th Panhellenic Conference of ECE Students (2013)
- Member of the IEEE Student Branch (Talks and Seminars team) (2012)
- Diploma in Modern Song and Jazz Harmony, Nakas Conservatory (2011)