

CONTACT INFORMATION	Computer Science Department Brown University Providence, RI 02912	<i>e-mail:</i> alessio_mazzetto@brown.edu https://cs.brown.edu/~amazzett/
RESEARCH INTERESTS	theoretical computer science; statistical learning; machine learning; online learning; weak supervision; transfer learning; semi-supervised learning; few-shot learning; zero-shot learning; distribution drift; clustering; distributed algorithms; adversarial robustness; trustworthy AI; large-scale data analysis	
EDUCATION	Brown University , Providence, Rhode Island USA Ph.D. Student, Computer Science (2019 - current) <ul style="list-style-type: none">• Advisor: Eli Upfal GPA: 4.0/4.0 University of Padua , Padova, Italy Second-level degree in Computer Engineering (\sim M.Sc.), July 2019 Final mark: 110/110 cum laude GPA: 30/30 (with extra honors over 100% courses) Thesis: “Distributed Clustering in General Metrics via Coresets” <ul style="list-style-type: none">• Advisors: A. Pietracaprina and G. Pucci University of Padua , Padova, Italy First-level degree in Information Engineering (\sim B.Sc.), July 2017 Final mark: 110/110 cum laude GPA: 30/30 (with extra honors in 11/19 courses) Thesis: “Analysis and implementation of streaming algorithms for k -center clustering” <ul style="list-style-type: none">• Advisors: A. Pietracaprina, G. Pucci, and M. Ceccarello	
WORK EXPERIENCE	Yahoo! Research , Research Internship Worked on prediction models for advertisement in the Scalable Machine Learning team within the DSP research branch.	June 2023 - August 2023
PUBLICATIONS	A. Mazzetto , R. Esfandiarpour, A. Singirikonda, E. Upfal, and S. Bach. “An Adaptive Method for Weak Supervision with Drifting Data.” AISTATS, 2025. A. Mazzetto , M. Ceccarello, A. Pietracaprina, G. Pucci, and E. Upfal. “Center-Based Approximation of a Drifting Distribution.” ALT, 2025. E. Dandolo, A. Mazzetto , A. Pietracaprina, G. Pucci. “MapReduce Algorithms for Robust Center-Based Clustering in Doubling Metrics.” Journal of Parallel and Distributed Computing, 2024. A. Mazzetto . “An Improved Algorithm for Learning Drifting Discrete Distributions.” AISTATS, 2024. A. Mazzetto and E. Upfal. “An Adaptive Algorithm for Learning with Unknown Distribution Drift”. NeurIPS, 2023 A. Mazzetto and E. Upfal. “Nonparametric Density Estimation under Distribution Drift”. ICML, 2023.	

A. Mazzetto*, C. Menghini*, A. Yuan, E. Upfal, and S. Bach. “Tight Lower Bounds on Worst-Case Guarantees for Zero-Shot Learning with Attributes”. NeurIPS, 2022.

A. Mazzetto*, C. Cousins*, D. Sam, S. Bach, and E. Upfal. “Adversarial Multiclass Learning under Weak Supervision with Performance Guarantees”. ICML, 2021.

A. Mazzetto, D. Sam, A. Park, E. Upfal, and S. Bach. “Semi-Supervised Aggregation of Dependent Weak Supervision Sources With Performance Guarantees”. AISTATS, 2021.

A. Mazzetto, A. Pietracaprina, and G. Pucci. “Accurate MapReduce algorithms for k -median and k -means in General Metric Spaces”. ISAAC, 2019.

AWARDS AND ACHIEVEMENTS

“Kanellakis Fellowships”, Spring 2024, Spring 2025.

- The fellowship is awarded annually to selected students in the Computer Science department at Brown University.

“Best Master Thesis in Theoretical Computer Science” award, 2020.

- Capitolo Italiano of EATCS, 2020.
- The award is given to the best master thesis in Theoretical Computer Science in Italy.
- The thesis was presented at ICTCS 2020.

“Fondazione Luciano Iglesias” award, 2019.

- The award is bestowed to the top 15 master students in the Computer Engineering department of University of Padua.

“Mille e una Lode” award, University of Padua, 2016.

- The award is bestowed to the top ($\sim 3\%$) students of the University of Padua.

Member of the Italian team at the International Olympiad in Informatics (**IOI**), Taiwan, July 2014.

- The IOI is the most prestigious computer science competition in the world for secondary school students.

Contestant at the Intel International Science and Engineering Fair (**ISEF**), Los Angeles, May 2014.

- World’s largest international pre-college science competition.

Contestant at the Taiwan International Science Fair (**TISF**), Taiwan, January 2014.

- Team qualified for TISF at the Italian scientific fair FAST in 2013.

Silver Medal at Italian Olympiads in Informatics, 2013.

Bronze Medal at Italian Olympiads in Informatics, 2012.

INVITED TALKS

Learning with Drifting Input Distributions. Dagstuhl Seminar 24391: Statistical and Probabilistic Methods in Algorithmic Data Analysis. September 2024.

k-means with distribution drift: adaptively choosing the window size. Workshop ALACARTE’23 on Algorithmic Aspects of Clustering and Related Problems in Bertinoro. September 2023.

Theory and Methods for Weak-Supervision and Zero-Shot Learning. Seminar at University of Padua. July 2022.

Distributed Clustering in General Metrics via Coresets. Short presentation of my Master Thesis work at ICTCS 2020. This work won the best master thesis in Theoretical Computer Science in Italy award

from Capitolo Italiano of EATCS, 2020.

TEACHING
EXPERIENCE

Co-instructor, Brown University

- Advanced Introduction to Probability for Computing and Data Science (CS145, Fall 2023).

Graduate Teaching Assistant, Brown University

- CSCI 2952-M: The Works that Made and Changed Machine Learning . Fall 2021.
- CSCI 1550/2540: Probabilistic Methods in Computer Science. Spring 2021, Spring 2022.

Teaching Assistant, University of Padua

- Introduction to Computer Science. Fall 2018.
- Linear Algebra and Geometry. Spring 2017.

REVIEWER
EXPERIENCE

Subreviewer: KDD2020, KDD 2022, SDM 2024

Program Committee: AISTATS 2021, NeurIPS 2023 (Top Reviewer), ICLR 2024, ICML 2024, KDD 2024, NeurIPS 2024 (Top Reviewer), ICLR 2025, AAAI 2025

RELEVANT
COURSEWORK

Brown University

- Probabilistic Methods for Computer Science
- Sublinear Algorithms for Big Data
- Computational Probability and Statistics
- Learning and Sequential Decision Making
- Works that Made & Changed ML

University of Padua

- Machine Learning
- Big Data Computing
- Data Structure and Algorithms I & II
- Operation Research
- Parallel Computing

PROGRAMMING
LANGUAGES

Programming Languages: C, C++, Java, Python, MATLAB, SQL, PHP

Tools and Libraries: TensorFlow, Keras, SciPy, Apache Spark

REFERENCES

Prof. Eli Upfal (Brown University, Ph.D. advisor). Email: upfal.rec@gmail.com

Prof. Stephen Bach (Brown University). Email: stephen_bach@brown.com

Prof. Michael Littman (Brown University). Email: michael.littman@brown.com