

Charikleia (Chara) Podimata

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RESEARCH INTERESTS	incentive-aware ML, decision making under uncertainty, AI policy-making, online learning, mechanism design, topics at the interface of CS, Economics & ML
EMPLOYMENT	Assistant Professor OR/Stat, MIT Sloan Jun. 2023 - present Principal Investigator Archimedes/Athena RC Jun. 2023 - present Postdoctoral Fellow , UC Berkeley, CA Aug. 2022 - Jul. 2023
EDUCATION	Harvard University , Cambridge, MA Aug. 2016 - Nov. 2022 Ph.D in Computer Science <i>Dissertation</i> : “Incentive-Aware Machine Learning for Decision Making” <i>Advisor</i> : Yiling Chen National Technical University of Athens , Greece Sept. 2010 - Jan. 2016 Diploma in Electrical Engineering and Computer Science (5-year joint degree) <i>GPA</i> : 9.47/10 <i>Thesis</i> : “Approximations of Liquid Welfare for Combinatorial Auctions” <i>Advisor</i> : Dimitris Fotakis
SELECTED HONORS & AWARDS	FODSI Postdoctoral Fellowship 2022-2023 Siebel Scholarship 2021-2022 MSR Dissertation Grant 2021-2022 Selected as part of the Rising Stars in EECS in Berkeley 2020 Poster Honorary Mention 14th Annual ML Symposium (NYAS) 2020 Finalist for 2020 Facebook PhD Fellowship (top 4%) 2020 Spotlight 2nd Place Prize, 13th Annual ML Symposium (NYAS) 2019 Finalist of the 2019 Microsoft Research PhD Fellowship 2019 Certificate of Distinction in Teaching , Harvard University 2017, 2018 Among 5 papers shortlisted for Best Paper Award, EC18
TUTORIALS	Incentive-Aware Machine Learning: A Tale of Robustness, Fairness, Improvement, and Performativity NeurIPS 2022 Dec. 2022 Do we incentivize honest effort or gaming in incentive-aware learning? “Optimizing the Efforts of Others” workshop at STOC22 (invited) Jun. 2022 [https://www.charapodimata.com/files/presentations/STOC22-tutorial.pdf] Algorithms for Incentive-Aware Learning Full-day course in the University of Zurich summer school (invited) Jun. 2021 How to Achieve Both Transparency and Accuracy in Predictive Decision Making: an Introduction to Strategic Prediction , FAccT21 Mar. 2021

Co-taught with Benjamin Edelman and Yonadav Shavit
[\[https://www.benjaminedelman.com/tutorial.html\]](https://www.benjaminedelman.com/tutorial.html)

Incentive-Compatible and Incentive-Aware Learning, EC20 Jun. 2020
Co-taught with Nika Haghtalab
[\[https://www.charapodimata.com/EC20-tutorial.html\]](https://www.charapodimata.com/EC20-tutorial.html)

TEACHING **Instructor, MIT Sloan** Fall 2023
Course: Data, Models, and Decisions (MIT 15.060)

Teaching Fellow, Harvard University Fall 2017, Fall 2018, Fall 2020
Course: Introduction to Optimization (AM121)
Instructor (2017, 2018): Yiling Chen
Instructor (2020): Yiling Chen & Margo Levine

Teaching Assistant, NTUA, Greece Fall 2015
Courses: Introduction to programming (PaZcal), Algorithms and Complexity
Instructor: Dimitris Fotakis

RESEARCH ADVISING **Zijie (Jerry) Zhou** (co-advised with P. Jaillet) 2023 - present
PhD student at MIT ORC

Apostolis Tsorvantzis (co-advised with D. Fotakis, C. Caramanis) 2023 - present
PhD student at Archimedes AI/Athena RC

Chrysa Oikonomou (co-advised with K. Sotiraki) 2023 - present
PhD student at Archimedes AI/Athena RC

SELECTED TALKS **The Disparate Effects of Recommending to Strategic Users**
Stanford RAIN Seminar (**invited**) May 2023
Morgan Stanley ML research seminar (**invited**) Aug. 2023

Information Discrepancy in Strategic Learning
TOC4Fairness Online Seminar Series (**invited**) Oct. 2022

Corruption-Robust Contextual Search
Simons institute workshop on “Quantifying Uncertainty” (**invited**) Sep. 2022

Transparency and Accuracy in Predictive Decision Making: an Introduction to Strategic Prediction
Quant Seminar at the U.S. Securities and Exchange Commission Apr. 2022

Incentive-Aware Machine Learning for Decision-Making
University of Michigan, IOE Department Jan. 2022
MIT Sloan, OR/Stat Group Jan. 2022
Cornell, ORIE Department Jan. 2022
USC Marshall, OM Group Jan. 2022
Stanford GSB, OIT Group Jan. 2022
CMU Tepper, OR Group Feb. 2022
TTIC Feb. 2022
UChicago, Data Science + CS Feb. 2022

Northeastern, CS Department	Feb. 2022
Cornell, Information Science Department	Feb. 2022
Columbia, IEOR Department	Feb. 2022
Yale, Stats and Data Science	Feb. 2022
UC Berkeley, Statistics Department	Mar. 2022
MIT EECS, AI + D	Mar. 2022
US General Services Administration Data Science Seminar	May 2022
CMU's 5th YinzOR Conference (plenary talk)	Aug. 2022

Contextual Search in the Presence of Irrational Agents

Cornell Young ORIE Researchers Workshop	Oct. 2021
BU Algorithms and Theory Seminar	Oct. 2021
NEU Theory Lunch	Nov. 2021
Stanford Information Systems Laboratory Colloquium	Jan. 2022
Amazon Ads	Apr. 2022

Learning Strategy-Aware Linear Classifiers

Northeastern University Theory Seminar	Nov. 2019
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Learning to Bid Without Knowing your Value

Google NYC, Algorithms Seminar.	Jul. 2018
Yahoo! Research NYC, Algorithms Seminar.	Jun. 2018

INTERNSHIPS

Research Intern , Google Research NYC	May - Aug., 2021
Research Intern , Microsoft Research NYC	Feb. - May, 2020
Research Intern , Microsoft Research NYC	May - Aug., 2019
Business Intern , Google Athens, Greece	Feb. - Aug. 2016

PUBLICATIONS

(Alphabetical
Author Order)

Journals

Contextual Search in the Presence of Adversarial Corruptions

Akshay Krishnamurthy, Thodoris Lykouris, Chara Podimata, and Robert Schapire
Operations Research 2022 (OR22)
[\[https://arxiv.org/pdf/2002.11650.pdf\]](https://arxiv.org/pdf/2002.11650.pdf)

Conferences

Corruption-Robust Contextual Search through Density Updates

Renato Paes Leme, Chara Podimata, and Jon Schneider
In Proc. of the 35th Annual Conference on Learning Theory (COLT22)
[\[https://arxiv.org/pdf/2206.07528.pdf\]](https://arxiv.org/pdf/2206.07528.pdf)

Information Discrepancy in Strategic Learning

Yahav Bechavod, Chara Podimata, Zhiwei Steven Wu, and Juba Ziani
In Proc. of the 39th International Conference on Machine Learning (ICML22)
[\[https://arxiv.org/pdf/2103.01028.pdf\]](https://arxiv.org/pdf/2103.01028.pdf)

Contextual Search in the Presence of Irrational Agents

Akshay Krishnamurthy, Thodoris Lykouris, Chara Podimata, and Robert Schapire
In the Proc. of the 53rd ACM Symposium on Theory of Computing (STOC21)
Operations Research 2022
[\[https://arxiv.org/pdf/2002.11650.pdf\]](https://arxiv.org/pdf/2002.11650.pdf)

Adaptive Discretization for Adversarial Lipschitz Bandits
Chara Podimata and Aleksandrs Slivkins
In the Proc. of the 34th Annual Conference on Learning Theory (COLT21)
[\[https://arxiv.org/pdf/2006.12367.pdf\]](https://arxiv.org/pdf/2006.12367.pdf)

Learning Strategy-Aware Linear Classifiers
Yiling Chen, Yang Liu, and Chara Podimata
In Proc. of the 34th Conf. on Neural Information Processing Systems (NeurIPS20)
[\[https://arxiv.org/pdf/1911.04004.pdf\]](https://arxiv.org/pdf/1911.04004.pdf)

No-Regret and Incentive-Compatible Online Learning
Rupert Freeman, David Pennock, Chara Podimata, and Jennifer Wortman Vaughan
In Proc. of the 37th International Conference on Machine Learning (ICML20)
Poster Presentation Honorary Mention 14th Annual ML Symposium (NYAS).
[\[https://arxiv.org/pdf/2002.08837.pdf\]](https://arxiv.org/pdf/2002.08837.pdf)

Strategyproof Linear Regression in High Dimensions: An Overview
Yiling Chen, Chara Podimata, Ariel D. Procaccia, and Nisarg Shah
ACM SIGEcom Exchanges (Research Letter) **Invited**
[\[https://www.sigecom.org/exchanges/volume_17/1/CHEN.pdf\]](https://www.sigecom.org/exchanges/volume_17/1/CHEN.pdf)

A Bridge between Liquid and Social Welfare in Combinatorial Auctions with Submodular Bidders
Dimitris Fotakis, Kyriakos Lotidis, and Chara Podimata
In Proc. of the 33rd AAAI Conference on Artificial Intelligence (AAAI19)
[\[https://arxiv.org/pdf/1809.01803v1.pdf\]](https://arxiv.org/pdf/1809.01803v1.pdf)

Learning to Bid Without Knowing your Value
Zhe Feng, Chara Podimata, and Vasilis Syrgkanis
In Proc. of the 19th ACM Conference on Economics and Computation (EC18)
Spotlight award 2nd place prize at the 13th Annual ML Symposium (NYAS).
[\[https://arxiv.org/abs/1711.01333\]](https://arxiv.org/abs/1711.01333)

Strategyproof Linear Regression in High Dimensions
Yiling Chen, Chara Podimata, Ariel D. Procaccia, and Nisarg Shah
In Proc. of the 19th ACM Conference on Economics and Computation (EC18)
Among the 5 shortlisted papers for the Best Paper Award
[\[https://arxiv.org/pdf/1805.10693.pdf\]](https://arxiv.org/pdf/1805.10693.pdf)

Preprints

Strategyproof Decision-Making in Panel Data Settings and Beyond
Keegan Harris, Anish Agarwal, Chara Podimata, and Steven Zhiwei Wu
[\[http://arxiv.org/abs/2211.14236\]](http://arxiv.org/abs/2211.14236)

Recommending to Strategic Users

Andreas Haupt, Chara Podimata, and Dylan Hadfield-Menell
[\[https://arxiv.org/pdf/2302.06559.pdf\]](https://arxiv.org/pdf/2302.06559.pdf)

Calibrated Stackelberg Games: Learning Optimal Commitments Against Calibrated Agents

Nika Haghtalab, Chara Podimata, and Kunhe Yang
[\[https://arxiv.org/pdf/2306.02704.pdf\]](https://arxiv.org/pdf/2306.02704.pdf)

Strategic Apple Tasting

Keegan Harris, Chara Podimata, and Steven Zhiwei Wu
[\[https://arxiv.org/pdf/2306.06250.pdf\]](https://arxiv.org/pdf/2306.06250.pdf)

Bandits with Deterministically Evolving States

Khashayar Khosravi, Renato Paes Leme, Chara Podimata, and Apostolis Tsorvantzis
[\[https://arxiv.org/pdf/2307.11655.pdf\]](https://arxiv.org/pdf/2307.11655.pdf)

PROFESSIONAL Area Chair: NeurIPS2023 SERVICE

PC Member: WINE2023, COLT 2020-2023, FORC23, EAAMO22-23, NeurIPS2022, ICML2022-2023, FAccT2022, WINE 2021, ICML2021 (**Best Reviewers Award**), NeurIPS 2020-2021 (**Best Reviewers Award**), IJCAI 2020, Emerging Track on AI for Social Impact (AAAI-20, AAAI-21)

Journal Refereeing: Journal of American Statistical Association (JASA), Management Science (MS), Operations Research (OR), Review of Economics and Statistics, Artificial Intelligence Journal (AIJ), Transactions of Machine Learning Research (TMLR), Journal of Machine Learning Research (JMLR), IEEE Transactions on Control of Network Systems (TCNS), Theoretical Computer Science (TCS), Theory of Computing Systems (ToCS)

COMMUNITY SERVICE

EC Mentoring Workshop , <i>Presenter for “How-To” talk</i>	EC23
LeT-All , <i>Volunteer Panelist</i>	Oct. 2022
EC Mentoring Workshop , <i>Volunteer Panelist</i>	EC 2022
LeT-All , <i>Volunteer Teaching Assistant</i>	ALT 2022
TA at Nicole Immorlica’s session on Peer Review	
Google Serve, Athens, Greece , <i>Volunteer</i>	June 2016
<i>Project:</i> Building a playground for refugee kids in the refugee camp (Elaionas, Greece)	
Organizing 1st Girls Day event at Google , Greece	Mar. 2016
As part of my participation at Women@Google	
Instructor at Code it Like a Girl , Athens, Greece	May 2015 - Sep. 2016
Code it Like a Girl is a volunteering start-up teaching coding to women of all ages.	
Free tutoring for children of impoverished families , Athens, Greece	2012-2014