

Nicolò Antonio Cesa-Bianchi – Selected publications

[Books and Monographs]

- S. Bubeck and N. Cesa-Bianchi
Regret Analysis of Stochastic and Nonstochastic Multi-armed Bandit Problems
Foundations and Trends in Machine Learning, 5(1)1-122, 2012.
- N. Cesa-Bianchi and G. Lugosi
Prediction, Learning, and Games
Cambridge University Press, 2006.

[Active Learning and Clustering]

- M. Bressan, N. Cesa-Bianchi, S. Lattanzi, A. Paudice, and M. Thiessen
Active learning of classifiers with label and seed queries
Advances in Neural Information Processing Systems 35 (NeurIPS), 2022.
- M. Bressan, N. Cesa-Bianchi, S. Lattanzi, and A. Paudice
On margin-based cluster recovery with oracle queries
Advances in Neural Information Processing Systems 34 (NeurIPS), 2021.
- M. Bressan, N. Cesa-Bianchi, S. Lattanzi, and A. Paudice
Exact recovery of clusters in finite metric spaces using oracle queries
Proceedings of the 34th Annual Conference on Learning Theory (COLT). PMLR 134:775-803, 2021.
- M. Bressan, N. Cesa-Bianchi, S. Lattanzi, and A. Paudice
Exact recovery of mangled clusters with same-cluster queries
Advances in Neural Information Processing Systems 33 (NeurIPS), 2020 (oral presentation).
- M. Bressan, N. Cesa-Bianchi, A. Paudice, and F. Vitale
Correlation clustering with adaptive similarity queries
Advances in Neural Information Processing Systems 32 (NeurIPS), 2019.

[Bandit Problems and Sequential Decision-Making]

- N. Cesa-Bianchi, T. Cesari, R. Colomboni, F. Fusco, and S. Leonardi
Repeated Bilateral Trade Against a Smoothed Adversary
Proceedings of the 36th Annual Conference on Learning Theory (COLT), PMLR 195:1095-1130, 2023.
- D. van der Hoeven, L. Zierahn, T. Lancewicki, A. Rosenberg, and N. Cesa-Bianchi
A Unified Analysis of Nonstochastic Delayed Feedback for Combinatorial Semi-Bandits, Linear Bandits, and MDPs
Proceedings of the 36th Annual Conference on Learning Theory (COLT). PMLR 195:1285-1321, 2023.

- E. Esposito, S. Masoudian, H. Qiu, D. van der Hoeven, N. Cesa-Bianchi, and Y. Seldin
Delayed bandits: when do intermediate observations help?
Proceedings of the 40th International Conference on Machine Learning (ICML).
PMLR 202:9374-9395, 2023.
- D. van der Hoeven, C. Pike-Burke, H. Qiu, and N. Cesa-Bianchi
Trading-off payments and accuracy in online classification with paid stochastic experts
Proceedings of the 40th International Conference on Machine Learning (ICML).
PMLR 202:34809-34830, 2023.
- K. Eldowa, N. Cesa-Bianchi, A. Metelli, and M. Restelli
Information-theoretic regret bounds for bandits with fixed expert advice
Information Theory Workshop (ITW), 2023.
- N. Cesa-Bianchi, T. Cesari, T. Osogami, M. Scarsini, and S. Wasserkrug
Learning the Stackelberg equilibrium in a newsvendor game
International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2023.
- C. Rouyer, D. van der Hoeven, N. Cesa-Bianchi, and Y. Seldin
A near-optimal best-of-both-worlds algorithm for online learning with feedback graphs
Advances in Neural Information Processing Systems 35 (NeurIPS), 2022.
- N. Cesa-Bianchi, T. Cesari, R. Colomboni, C. Gentile, and Y. Mansour
Nonstochastic bandits with composite anonymous feedback
Journal of Machine Learning Research. JMLR, 23(227):1-24, 2022.
- D. van der Hoeven and N. Cesa-Bianchi
Nonstochastic bandits and experts with arm-dependent delays
Proceedings of the 25th International Conference on Artificial Intelligence and Statistics (AISTATS). PMLR 151:2022-2044, 2022.
- P. Laforgue, G. Clerici, N. Cesa-Bianchi, and Ran Gilad-Bachrach
A last switch dependent analysis of satiation and seasonality in bandits
Proceedings of the 25th International Conference on Artificial Intelligence and Statistics (AISTATS). PMLR 151:971-990, 2022.
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ROI maximization in stochastic online decision-making
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- D. van der Hoeven, F. Fusco, and N. Cesa-Bianchi
Beyond bandit feedback in online multiclass classification
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Proceedings of the 38th International Conference on Machine Learning (ICML).
PMLR 139:9127-9135, 2021.
- L. Cella and N. Cesa-Bianchi
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Statistics (AISTATS). PMLR, 108:1168-1177, 2020.
- T. Thune, N. Cesa-Bianchi, and Y. Seldin
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- I. Kuzborskij, L. Cella, and N. Cesa-Bianchi
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- N. Alon, N. Cesa-Bianchi, C. Gentile, S. Mannor, Y. Mansour, and O. Shamir
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SIAM Journal on Computing. 46(6):1785-1826, 2017.
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Algorithmic chaining and the role of partial feedback in online nonparametric
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65:465-481, 2017.
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Multi-armed bandit problem
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Online learning with feedback graphs: beyond bandits
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- S. Bubeck, N. Cesa-Bianchi, and G. Lugosi
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[Learning on Graphs]

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A linear time active learning algorithm for link classification
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- N. Cesa-Bianchi, C. Gentile, F. Vitale, and G. Zappella
A correlation clustering approach to link classification in signed networks
Proceedings of the 25th Annual Conference on Learning Theory (COLT). JMLR Workshop and Conference Proceedings, 23:34.1-34.20, 2012.
- F. Vitale, N. Cesa-Bianchi, C. Gentile, and G. Zappella

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Proceedings of the 22nd Conference on Learning Theory (COLT). Omnipress,
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[Online Learning]

- D. van der Hoeven, N. Zhivotovskiy, and N. Cesa-Bianchi
A regret-variance trade-off in online learning
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- N. Cesa-Bianchi, P. Laforgue, A. Paudice, and M. Pontil
Multitask online mirror descent
Transactions on Machine Learning Research, 2022.
- N. Cesa-Bianchi and F. Orabona
Online learning algorithms
Annual Review of Statistics and Its Application, 8:165-190, 2021.
- I. Kuzborskij and N. Cesa-Bianchi
Locally-adaptive nonparametric online learning
Advances in Neural Information Processing Systems 33 (NeurIPS), 2020.
- I. Kuzborskij and N. Cesa-Bianchi
Nonparametric online regression while learning the metric
Advances in Neural Information Processing Systems 30 (NIPS). Pages 667-676,
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- R. De Rosa, I. Gori, F. Cuzzolin, and N. Cesa-Bianchi

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- H. Luo, A. Agarwal, N. Cesa-Bianchi, and J. Langford
Efficient second order online learning by sketching
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A generalized online mirror descent with applications to classification and regression
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Efficient transductive online learning via randomized rounding
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IEEE Transaction on Information Theory, 57(12):7907-7931, 2011.
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- P. Auer, N. Cesa-Bianchi, and C. Gentile
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[Other Areas]

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