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Edoardo Airoidi's articles on arXiv

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Title: The Proximal Robbins-Monro Method
Authors: [Panos Toulis](#), [Thibaut Horel](#), [Edoardo M. Airoidi](#)
Comments: 35 pages, 2 figures
Subjects: Statistics Theory (math.ST); Computation (stat.CO); Methodology (stat.ME); Machine Learning (stat.ML)
- [2] [arXiv:1909.00472](#) [[pdf](#), [other](#)]
Title: Latent Space Modelling of Hypergraph Data
Authors: [Kathryn Turnbull](#), [Simón Lunagómez](#), [Christopher Nemeth](#), [Edoardo Airoidi](#)
Comments: 44 pages, 19 figures
Subjects: Methodology (stat.ME)
- [3] [arXiv:1512.06469](#) [[pdf](#)]
Title: A Co-evolution Model of Network Structure and User Behavior in Online Social Networks: The Case of Network-Driven Content Generation
Authors: [Prasanta Bhattacharya](#), [Tuan Q. Phan](#), [Xue Bai](#), [Edoardo Airoidi](#)
Subjects: Social and Information Networks (cs.SI); Physics and Society (physics.soc-ph); Applications (stat.AP)
- [4] [arXiv:1810.08259](#) [[pdf](#), [other](#)]
Title: A systematic investigation of classical causal inference strategies under mis-specification due to network interference
Authors: [Vishesh Karwa](#), [Edoardo M. Airoidi](#)
Subjects: Methodology (stat.ME)
- [5] [arXiv:1609.06245](#) [[pdf](#), [other](#)]
Title: Identification and estimation of treatment and interference effects in observational studies on networks
Authors: [Laura Forastiere](#), [Edoardo M. Airoidi](#), [Fabrizia Mealli](#)
Subjects: Methodology (stat.ME)
- [6] [arXiv:1803.02876](#) [[pdf](#), [other](#)]
Title: Optimizing cluster-based randomized experiments under a monotonicity assumption
Authors: [Jean Pouget-Abadie](#), [David C. Parkes](#), [Vahab Mirrokni](#), [Edoardo M. Airoidi](#)
Subjects: Methodology (stat.ME)
- [7] [arXiv:1801.07310](#) [[pdf](#), [other](#)]
Title: Propensity score methodology in the presence of network entanglement between treatments
Authors: [Panos Toulis](#), [Alexander Volfovsky](#), [Edoardo M. Airoidi](#)
Subjects: Statistics Theory (math.ST); Methodology (stat.ME)
- [8] [arXiv:1507.00803](#) [[pdf](#), [other](#)]
Title: Model-assisted design of experiments in the presence of network correlated outcomes

- Authors: [Guillaume W. Basse](#), [Edoardo M. Airolidi](#)
 Comments: 56 pages, 6 figures
 Subjects: Methodology (stat.ME); Social and Information Networks (cs.SI); Physics and Society (physics.soc-ph); Machine Learning (stat.ML)
- [9] [arXiv:1705.05752](#) [[pdf](#), [other](#)]
 Title: Limitations of design-based causal inference and A/B testing under arbitrary and network interference
 Authors: [Guillaume Basse](#), [Edoardo Airolidi](#)
 Subjects: Methodology (stat.ME); Applications (stat.AP)
- [10] [arXiv:1702.03578](#) [[pdf](#), [other](#)]
 Title: Elements of estimation theory for causal effects in the presence of network interference
 Authors: [Daniel L. Sussman](#), [Edoardo M. Airolidi](#)
 Subjects: Methodology (stat.ME)
- [11] [arXiv:1401.4718](#) [[pdf](#), [ps](#), [other](#)]
 Title: Bayesian Inference from Non-Ignorable Network Sampling Designs
 Authors: [Simon Lunagomez](#), [Edoardo Airolidi](#)
 Subjects: Methodology (stat.ME)
- [12] [arXiv:1408.2923](#) [[pdf](#), [other](#)]
 Title: Asymptotic and finite-sample properties of estimators based on stochastic gradients
 Authors: [Panos Toulis](#), [Edoardo M. Airolidi](#)
 Comments: Annals of Statistics, 2016, forthcoming; 71 pages, 37-page main body; 9 figures; 6 tables
 Subjects: Methodology (stat.ME); Computation (stat.CO); Machine Learning (stat.ML)
- [13] [arXiv:1603.06045](#) [[pdf](#), [other](#)]
 Title: Non-standard conditionally specified models for non-ignorable missing data
 Authors: [Alexander M Franks](#), [Edoardo M Airolidi](#), [Donald B Rubin](#)
 Comments: 37 pages, 9 figures, 1 table
 Subjects: Methodology (stat.ME)
- [14] [arXiv:1407.6092](#) [[pdf](#), [other](#)]
 Title: Sharp Total Variation Bounds for Finitely Exchangeable Arrays
 Authors: [Alexander Volfovsky](#), [Edoardo Airolidi](#)
 Subjects: Statistics Theory (math.ST); Probability (math.PR)
- [15] [arXiv:1601.04083](#) [[pdf](#), [other](#)]
 Title: Observational studies with unknown time of treatment
 Authors: [Guillaume W. Basse](#), [Alexander Volfovsky](#), [Edoardo M. Airolidi](#)
 Subjects: Methodology (stat.ME); Applications (stat.AP)
- [16] [arXiv:1506.03159](#) [[pdf](#), [other](#)]
 Title: Copula variational inference
 Authors: [Dustin Tran](#), [David M. Blei](#), [Edoardo M. Airolidi](#)
 Comments: Appears in Neural Information Processing Systems, 2015
 Subjects: Machine Learning (stat.ML); Machine Learning (cs.LG); Computation (stat.CO); Methodology (stat.ME)
- [17] [arXiv:1509.06459](#) [[pdf](#), [other](#)]
 Title: Stochastic gradient descent methods for estimation with large data sets
 Authors: [Dustin Tran](#), [Panos Toulis](#), [Edoardo M. Airolidi](#)
 Subjects: Computation (stat.CO); Methodology (stat.ME); Machine Learning (stat.ML)
- [18] [arXiv:1506.07925](#) [[pdf](#), [other](#)]
 Title: Analyzing statistical and computational tradeoffs of estimation procedures
 Authors: [Daniel L. Sussman](#), [Alexander Volfovsky](#), [Edoardo M. Airolidi](#)
 Subjects: Computation (stat.CO); Machine Learning (stat.ML)
- [19] [arXiv:1410.8597](#) [[pdf](#), [other](#)]
 Title: Consistent estimation of dynamic and multi-layer block models
 Authors: [Qiuyi Han](#), [Kevin S. Xu](#), [Edoardo M. Airolidi](#)
 Comments: To appear at ICML 2015
 Journal-ref: Proceedings of the 32nd International Conference on Machine Learning (2015) 1511-1520

Subjects: Methodology (stat.ME); Social and Information Networks (cs.SI); Statistics Theory (math.ST); Physics and Society (physics.soc-ph)

[20] [arXiv:0912.3648](#) [[pdf](#), [other](#)]

Title: Geometric Representations of Random Hypergraphs

Authors: [Simón Lunagómez](#), [Sayan Mukherjee](#), [Robert L. Wolpert](#), [Edoardo M. Airol di](#)

Subjects: Statistics Theory (math.ST); Probability (math.PR); Machine Learning (stat.ML)

[21] [arXiv:1501.01234](#) [[pdf](#), [other](#)]

Title: Causal inference for ordinal outcomes

Authors: [Alexander Volfovsky](#), [Edoardo M. Airol di](#), [Donald B. Rubin](#)

Subjects: Methodology (stat.ME)

[22] [arXiv:1412.6734](#) [[pdf](#), [other](#)]

Title: Implicit Temporal Differences

Authors: [Aviv Tamar](#), [Panos Toulis](#), [Shie Mannor](#), [Edoardo M. Airol di](#)

Subjects: Machine Learning (stat.ML); Machine Learning (cs.LG)

[23] [arXiv:1012.0866](#) [[pdf](#), [other](#)]

Title: Generalized Species Sampling Priors with Latent Beta reinforcements

Authors: [Edoardo M. Airol di](#), [Thiago Costa](#), [Federico Bassetti](#), [Fabrizio Leisen](#), [Michele Guindani](#)

Comments: For correspondence purposes, Edoardo M. Airol di's email is airol di@fas.harvard.edu; Federico Bassetti's email is federico.bassetti@unipv.it; Michele Guindani's email is mguindani@mdanderson.org ; Fabrizio Leisen's email is fabrizio.leisen@gmail.com. To appear in the Journal of the American Statistical Association

Subjects: Statistics Theory (math.ST); Machine Learning (cs.LG); Methodology (stat.ME)

[24] [arXiv:1206.4631](#) [[pdf](#), [other](#)]

Title: A Poisson convolution model for characterizing topical content with word frequency and exclusivity

Authors: [Edoardo M Airol di](#), [Jonathan M Bischof](#)

Comments: Originally appeared in ICML2012

Subjects: Machine Learning (cs.LG); Computation and Language (cs.CL); Information Retrieval (cs.IR); Methodology (stat.ME); Machine Learning (stat.ML)

[25] [arXiv:1406.5799](#) [[pdf](#), [other](#)]

Title: Estimating cellular pathways from an ensemble of heterogeneous data sources

Authors: [Alexander Franks](#), [Florian Markowetz](#), [Edoardo Airol di](#)

Subjects: Molecular Networks (q-bio.MN); Applications (stat.AP); Methodology (stat.ME)

[26] [arXiv:1405.2566](#) [[pdf](#), [other](#)]

Title: Learning modular structures from network data and node variables

Authors: [Elham Azizi](#), [James E. Galagan](#), [Edoardo M. Airol di](#)

Comments: 22 pages, 6 figures, 3 tables, 3 algorithms

Subjects: Machine Learning (stat.ML); Social and Information Networks (cs.SI); Physics and Society (physics.soc-ph); Quantitative Methods (q-bio.QM); Applications (stat.AP)

[27] [arXiv:1402.1888](#) [[pdf](#), [ps](#), [other](#)]

Title: A Consistent Histogram Estimator for Exchangeable Graph Models

Authors: [Stanley H. Chan](#), [Edoardo M. Airol di](#)

Comments: 28 pages, 5 figures

Subjects: Methodology (stat.ME)

[28] [arXiv:1401.2756](#) [[pdf](#), [ps](#), [other](#)]

Title: Multi-way blockmodels for analyzing coordinated high-dimensional responses

Authors: [Edoardo M. Airol di](#), [Xiaopei Wang](#), [Xiaodong Lin](#)

Comments: Published in at [this http URL](#) the Annals of Applied Statistics ([this http URL](#)) by the Institute of Mathematical Statistics ([this http URL](#))

Journal-ref: Annals of Applied Statistics 2013, Vol. 7, No. 4, 2431-2457

Subjects: Applications (stat.AP)

[29] [arXiv:1310.0423](#) [[pdf](#), [ps](#), [other](#)]

Title: Inference of Network Summary Statistics Through Network Denoising

Authors: [Prakash Balachandran](#), [Edoardo Airol di](#), [Eric Kolaczyk](#)

Comments: 47 pages, 3 figures, submitted to the Annals of Statistics

- Subjects: Machine Learning (stat.ML); Spectral Theory (math.SP)
- [30] [arXiv:1311.1731](#) [[pdf](#), [ps](#), [other](#)]
 Title: Stochastic blockmodel approximation of a graphon: Theory and consistent estimation
 Authors: [Edoardo M Airolidi](#), [Thiago B Costa](#), [Stanley H Chan](#)
 Comments: 20 pages, 4 figures, 2 algorithms. Neural Information Processing Systems (NIPS), 2013
 Subjects: Methodology (stat.ME); Machine Learning (cs.LG); Social and Information Networks (cs.SI); Data Analysis, Statistics and Probability (physics.data-an); Machine Learning (stat.ML)
- [31] [arXiv:0912.5193](#) [[pdf](#), [ps](#), [other](#)]
 Title: Ranking relations using analogies in biological and information networks
 Authors: [Ricardo Silva](#), [Katherine Heller](#), [Zoubin Ghahramani](#), [Edoardo M. Airolidi](#)
 Comments: Published in at [this http URL](#) the Annals of Applied Statistics ([this http URL](#)) by the Institute of Mathematical Statistics ([this http URL](#))
 Journal-ref: Annals of Applied Statistics 2010, Vol. 4, No. 2, 615-644
 Subjects: Methodology (stat.ME); Machine Learning (cs.LG); Physics and Society (physics.soc-ph); Quantitative Methods (q-bio.QM); Applications (stat.AP)
- [32] [arXiv:1306.3466](#) [[pdf](#), [other](#)]
 Title: Sashimi plots: Quantitative visualization of RNA sequencing read alignments
 Authors: [Yarden Katz](#), [Eric T. Wang](#), [Jacob Silterra](#), [Schrage Schwartz](#), [Bang Wong](#), [Jill P. Mesirov](#), [Edoardo M. Airolidi](#), [Christopher B. Burge](#)
 Comments: 2 figures
 Subjects: Genomics (q-bio.GN)
- [33] [arXiv:1203.2821](#) [[pdf](#), [other](#)]
 Title: Graphlet decomposition of a weighted network
 Authors: [Hossein Azari Soufiani](#), [Edoardo M Airolidi](#)
 Comments: 25 pages, 4 figures, 3 tables
 Journal-ref: Journal of Machine Learning Research, Workshop & Conference Proceedings, vol. 22 (AISTATS), 2012
 Subjects: Methodology (stat.ME); Machine Learning (cs.LG); Social and Information Networks (cs.SI); Physics and Society (physics.soc-ph)
- [34] [arXiv:1105.6245](#) [[pdf](#), [other](#)]
 Title: Confidence sets for network structure
 Authors: [Edoardo M. Airolidi](#), [David S. Choi](#), [Patrick J. Wolfe](#)
 Comments: 17 pages, 3 figures, 3 tables
 Journal-ref: Statistical Analysis and Data Mining, vol. 4, pp. 461-469, 2011
 Subjects: Methodology (stat.ME); Social and Information Networks (cs.SI); Physics and Society (physics.soc-ph)
- [35] [arXiv:1011.4644](#) [[pdf](#), [ps](#), [other](#)]
 Title: Stochastic blockmodels with growing number of classes
 Authors: [David S. Choi](#), [Patrick J. Wolfe](#), [Edoardo M. Airolidi](#)
 Comments: 12 pages, 3 figures; revised version
 Journal-ref: Biometrika, 99:273--284, 2012
 Subjects: Statistics Theory (math.ST); Social and Information Networks (cs.SI); Methodology (stat.ME); Machine Learning (stat.ML)
- [36] [arXiv:0912.5410](#) [[pdf](#), [other](#)]
 Title: A survey of statistical network models
 Authors: [Anna Goldenberg](#), [Alice X Zheng](#), [Stephen E Fienberg](#), [Edoardo M Airolidi](#)
 Comments: 96 pages, 14 figures, 333 references
 Journal-ref: Foundations and Trends in Machine Learning, 2(2):1-117, 2009
 Subjects: Methodology (stat.ME); Machine Learning (cs.LG); Physics and Society (physics.soc-ph); Molecular Networks (q-bio.MN); Machine Learning (stat.ML)
- [37] [arXiv:0711.2520](#) [[pdf](#), [other](#)]
 Title: Mixed membership analysis of genome-wide expression data
 Authors: [Edoardo M Airolidi](#), [Stephen E Fienberg](#), [Eric P Xing](#)
 Comments: 22 pages, 4 figures

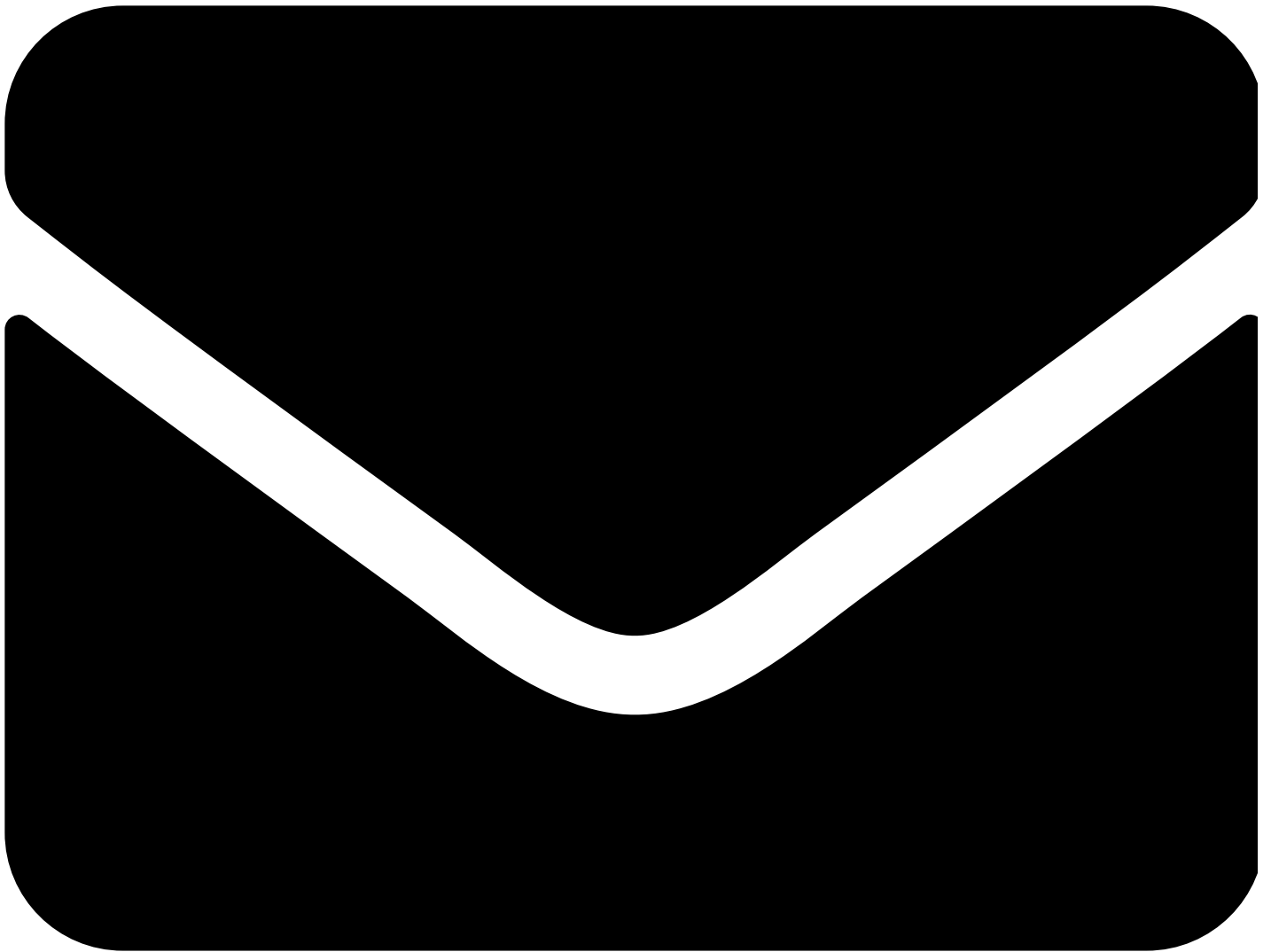
- Subjects: Quantitative Methods (q-bio.QM); Genomics (q-bio.GN)
- [38] [arXiv:0706.0294](#) [[pdf](#), [other](#)]
Title: Mixed membership analysis of high-throughput interaction studies: Relational data
Authors: [Edoardo M Airolidi](#), [David M Blei](#), [Stephen E Fienberg](#), [Eric P Xing](#)
Comments: 22 pages, 6 figures, 2 tables
Subjects: Molecular Networks (q-bio.MN); Quantitative Methods (q-bio.QM)
- [39] [arXiv:0706.2040](#) [[pdf](#), [other](#)]
Title: Getting started in probabilistic graphical models
Authors: [Edoardo M Airolidi](#)
Comments: 12 pages, 1 figure
Journal-ref: Airolidi EM (2007) Getting started in probabilistic graphical models. PLoS Comput Biol 3(12): e252
Subjects: Quantitative Methods (q-bio.QM); Machine Learning (cs.LG); Physics and Society (physics.soc-ph); Methodology (stat.ME); Machine Learning (stat.ML)
- [40] [arXiv:0705.4485](#) [[pdf](#), [other](#)]
Title: Mixed membership stochastic blockmodels
Authors: [Edoardo M Airolidi](#), [David M Blei](#), [Stephen E Fienberg](#), [Eric P Xing](#)
Comments: 46 pages, 14 figures, 3 tables
Journal-ref: Journal of Machine Learning Research, 9, 1981-2014.
Subjects: Methodology (stat.ME); Machine Learning (cs.LG); Statistics Theory (math.ST); Physics and Society (physics.soc-ph); Machine Learning (stat.ML)

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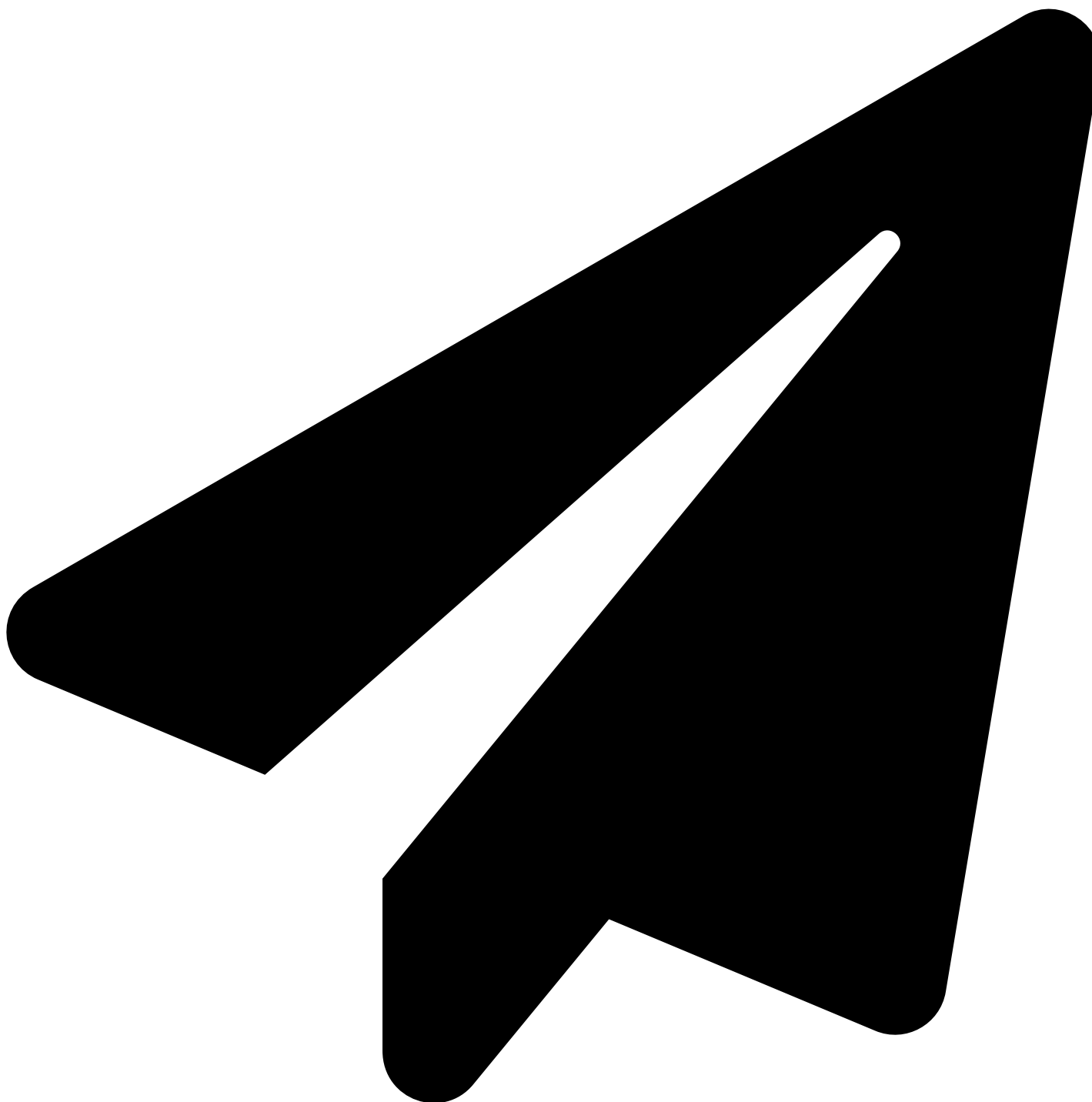
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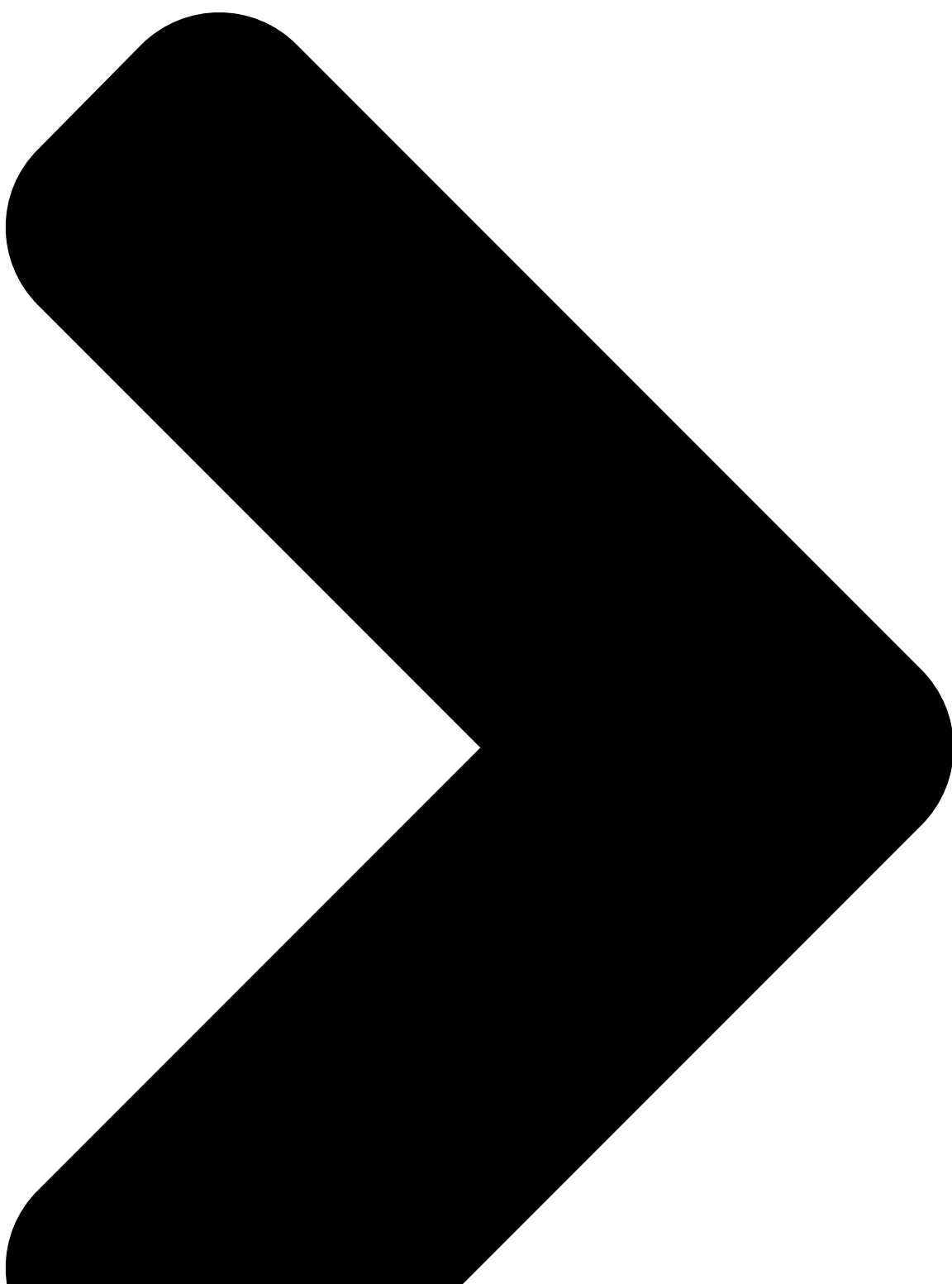
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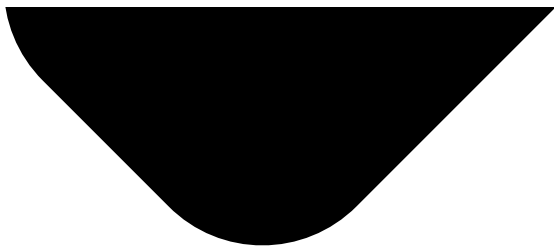
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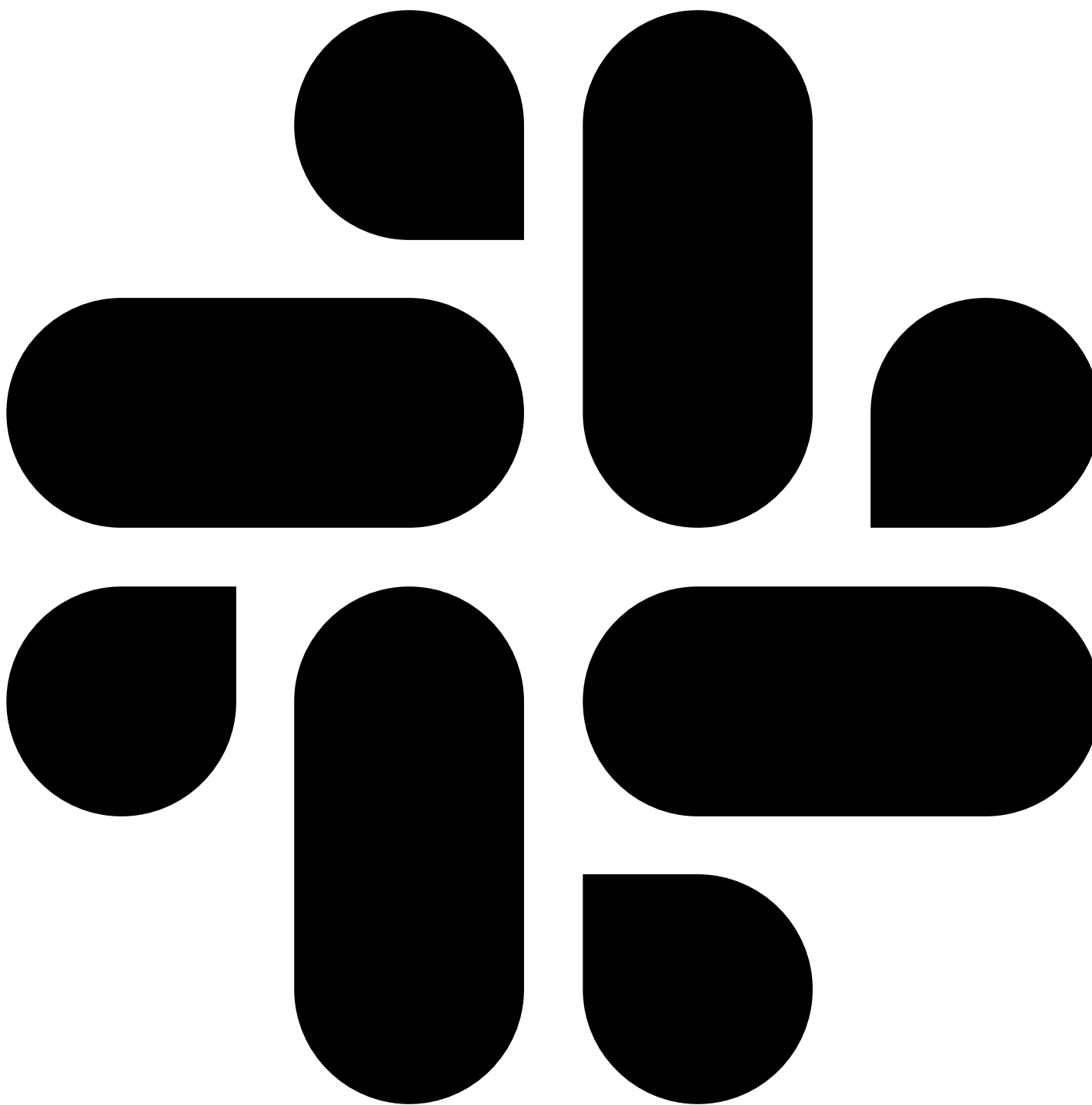




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