CV

Johan Larsson

March 27, 2023

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1 Education

2018 - now PhD in Statistics, Department of Statistics, Lund University

Supervisors: Jonas Wallin (main), Malgorzata Bogdan (co-supervisor)

2018 Bachelor's Degree in Statistics, Lund University

Supervisor: Peter Gustafsson

Title: eulerr: Area-proportional euler diagrams with ellipses

2 Publications

2.1 Published Articles

- [1] **J. Larsson** and J. Wallin, "The Hessian screening rule," in *Advances in Neural Information Processing Systems 35*, vol. 35, New Orleans, USA: Curran Associates, Inc., Dec. 6, 2022, pp. 15823–15835. [Online]. Available: https://papers.nips.cc/paper_files/paper/2022/hash/65a925049647eab0aa06a9faf1cd470b-Abstract-Conference.html.
- [2] T. Moreau, M. Massias, A. Gramfort, P. Ablin, P.-A. Bannier, B. Charlier, M. Dagréou, T. D. la Tour, G. Durif, C. F. Dantas, Q. Klopfenstein, J. Larsson, E. Lai, T. Lefort, B. Malézieux, B. Moufad, B. T. Nguyen, A. Rakotomamonjy, Z. Ramzi, J. Salmon, and S. Vaiter, "Benchopt: Reproducible, efficient and collaborative optimization benchmarks," in *Advances in Neural Information Processing Systems 35*, vol. 35, New Orleans, USA: Curran Associates, Inc., Dec. 6, 2022, pp. 25404–25421. [Online]. Available: https://proceedings.neurips.cc/paper_files/paper/2022/hash/a30769d9b62c9b94b72e21e0ca73f338-Abstract-Conference.html.
- [3] **J. Larsson**, "Look-ahead screening rules for the lasso," in 22nd European Young Statisticians Meeting Proceedings, Andreas Makridis, Fotios S. Milienos, Panagiotis Papastamoulis, Christina Parpoula, and Athanasios Rakitzis, Eds., Athens, Greece: Panteion University of Social and Political Sciences, Sep. 6–10, 2021, pp. 61–65, ISBN: 978-960-7943-23-1. [Online]. Available: https://www.eysm2021.panteion.gr/files/Proceedings_EYSM_2021.pdf.
- [4] J. Larsson, M. Bogdan, and J. Wallin, "The strong screening rule for SLOPE," in Advances in Neural Information Processing Systems 33, H. Larochelle, M. Ranzato, R. Hadsell, M. F. Balcan, and H. Lin, Eds., vol. 33, Virtual: Curran Associates, Inc., Dec. 6, 2020–12, pp. 14592–14603. [Online]. Available: https://papers.nips.cc/paper_files/paper/2020/hash/a7d8ae4569120b5bec12e7b6e9648b86-Abstract.html.
- [5] **J. Larsson** and P. Gustafsson, "A case study in fitting area-proportional Euler diagrams with ellipses using eulerr," in *Proceedings of International Workshop on Set Visualization and Reasoning*, vol. 2116, Edinburgh, United Kingdom: CEUR Workshop Proceedings, Jun. 2018, pp. 84–91.

CV Johan Larsson

2.2 Theses

[6] **J. Larsson**, "eulerr: Area-proportional Euler diagrams with ellipses," Bachelor thesis, Lund University, Lund, Sweden, 2018, 33 pp. [Online]. Available: http://lup.lub.lu.se/student-paper s/record/8934042.

3 Talks

2021, Oct 27	Designing a Distance-Based Course in Data Visualizations: Lessons Learned, Cramér Society Fall Meeting
2021, Sep 21	The Hessian Screening Rule and Adaptive Lasso Paths, Statistics Seminar at the Department of Mathematical Statistics, Chalmers/Gothenburg University
2021, Sep 9	${\bf Look-Ahead~Screening~Rules~for~the~Lasso}, \textit{European~Young~Statisticians~Meeting} \\ \textit{(EYSM)~2021}$
2020, May 8	The Strong Screening Rule for SLOPE, Statistical Learning Seminar
2018, June 18	A Case Study in Fitting Area-Proportional Euler Diagrams with Ellipses Using eulerr, $SetVR\ 2018$

4 Teaching

4.1 Instructor

2020-2022	Data Visualization, Department of Statistics, Lund University
2019-2021	Statistics: Basic Course, Department of Statistics, Lund University

4.2 Teaching Assistant

2021	Introduction to R Programming, Department of Statistics, Lund University
2019-2020	Data Mining and Visualization, Department of Statistics, Lund University
2019-2021	Statistics for Fire Engineers, Department of Statistics, Lund University
2019	Artificial Intelligence and Deep Learning Methods, Department of Statistics, Lund University

4.3 Course Development

Data Visualization, Department of Statistics, Lund University

Distance-based course in data visualization for students on the undergraduate level.

5 Supervision and Mentorship

2022	Main Supervisor, Master's Thesis, Data Analysis and Business Analytics, The De-
	partment of Statistics, Lund University

2019 – 2021 Google Summer of School Students: Qincheng Liu (2019) , Akarsh Goyal (2020) CV Johan Larsson

6 Referee Service

- Advanced in Neural Information Processing (NeurIPS), 2021, 2022. ISSN: 1049-5258
- International Conference for Machine Learning (ICML), 2022. ISSN: 2640-3498

7 Comittee Service

2020 - now Statistical Learning Seminar Series

https://statistical-learning-seminars.github.io/ Member of organizational committee

8 Software

SLOPE Generalized linear models with the sorted L1 norm

https://CRAN.R-project.org/package=SLOPE

benchopt Reproducible, efficient and collaborative optimization benchmarks

https://benchopt.github.io/

eulerr Area-proportional Euler diagrams with ellipses

https://CRAN.R-project.org/package=eulerr

qualpair Automatic generation of qualitative color palettes using color difference algorithms

https://CRAN.R-project.org/package=tactile

9 Scholarships

2018 Google Summer of Code, The R Project for Statistical Computing

Project: Fast Sparse Linear Models for Big Data with SAGA

10 Contracted Work

2021 WHO Antimicrobial Resistance Dashboard

Contracted work to develop and deploy a visualization dashboard for WHO's Antimicrobial Resistance team in Europe.