# Eva García-Martín

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#### **EDUCATION**

# **Doctor of Philosophy**

2015 - Present

Department of Computer Science and Engineering

Blekinge Institute of Technology, Karlskrona, Sweden.

Thesis focus: Energy efficiency in Machine Learning

Advisors: Niklas Lavesson, Håkan Grahn

Master of Science 2012 - 2013

Department of Computer Science and Engineering

Blekinge Institute of Technology, Karlskrona, Sweden.

Thesis: Hashtags and followers: Experimental study on the online social network Twitter

Advisor: Niklas Lavesson

# Bachelors Degree in Telecommunications Engineering

2009 - 2013

Department of Telecommunications Engineering

Rey Juan Carlos University, Madrid, Spain.

#### **EXPERIENCE**

## Blekinge Institute of Technology

2015 - Present

Doctoral student in Computer Science

· PhD in Machine Learning under the project: "Scalable resource-efficient systems for big data analytics", focusing on analyzing the energy efficiency of machine learning algorithms.

#### Télécom ParisTech

Oct 2018 - Nov 2018

Research stay

· Research stay at Télécom ParisTech to work with Prof. Albert Bifet on energy efficient data streams.

Indra June 2014 - Dec 2014

Business Analyst Consultant

· Social networks analysis using Mongo DB, Python, Twitter API, R and Java.

Finja5 May 2013 - Sep 2103

Open Source and Social Innovation researcher

- · Internship at Finja5 as a consultant for Novatium.
- · Design and development of web applications using Python, PHP, Javascript and Java.

#### **PUBLICATIONS**

#### Journals

· Abghari, S., García-Martín, E., Johansson, C., Lavesson, N., & Grahn, H. Trend analysis to automatically identify heat program changes. Energy Procedia, 116, 407-415, (2017).

· García-Martín E., Lavesson N., & Doroud M. Hashtags and followers: An experimental study of the online social network Twitter, Social Network Analysis and Mining (SNAM), 6(1) (pp. 1-15), Springer, (2016).

## **Book Chapters**

· García-Martín E., Lavesson N., & Grahn H. Energy Efficiency Analysis of the Very Fast Decision Tree algorithm. In: Missaoui R., Abdessalem T., Latapy M. (eds) Trends in Social Network Analysis. Lecture Notes in Social Networks, (pp. 229-252), Springer, (2017).

#### Conferences

- · García-Martín E., Lavesson N., Grahn H., Casalicchio E., & Boeva V. Hoeffding Trees with nmin adaptation. Accepted at DSAA 2018: The 5th IEEE International Conference on Data Science and Advanced Analytics, (2018). (To appear)
- García-Martín E., Lavesson N., & Grahn H. *Identification of Energy Hotspots: A Case Study of the Very Fast Decision Tree.* In: Au M., Castiglione A., Choo KK., Palmieri F., Li KC. (eds) Green, Pervasive, and Cloud Computing. GPC 2017. Lecture Notes in Computer Science, 10232, (pp. 267-281), Springer, (2017).
- · Lundberg L., Lennerstad H., **García-Martín E.**, Lavesson N., Boeva V. *Increasing the Margin in Support Vector Machines through Hyperplane Folding*, 26th Annual Machine Learning Conference of the Benelux (Benelearn), (2017).
- García-Martín E., Lavesson N., & Grahn H. Energy Efficiency in Data Stream Mining. 2015 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM).

#### Workshop papers

- · García-Martín E., Lavesson, N., Grahn, H., Casalicchio, E., & Boeva, V. (2018). How to Measure Energy Consumption in Machine Learning Algorithms. In Green Data Mining, 1st International Workshop on Energy Efficient Data Mining and Knowledge Discovery held in conjuction with ECML-PKDD 2018: European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases Workshops. Lecture Notes in Computer Science. Springer. (To appear)
- García-Martín E., Lavesson N., Grahn H., & Boeva V. (2017). Energy Efficiency in Machine Learning: A position paper. In 30th Annual Workshop of the Swedish Artificial Intelligence Society SAIS 2017, May 15–16, 2017, Karlskrona, Sweden 137, (pp. 68-72). Linköping University Electronic Press.
- García-Martín E., & Lavesson N. (2017) Is it ethical to avoid error analysis? 2017 Workshop on Fairness, Accountability, and Transparency in Machine Learning (FAT/ML 2017), held in conjunction with the 23rd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, https://arxiv.org/abs/1706.10237
- · García-Martín E., Lavesson N., Grahn H., Casalicchio E., & Boeva V. (2017) Adaptive Very Fast Decision Tree, preliminary results. in 12th Women in Machine Learning Workshop (WiML 2017), in conjunction with NIPS 2017, December 2017, Long Beach, USA. Presented as a poster
- · García-Martín E., Lavesson N., Grahn H., Casalicchio E., & Boeva V. (2017) Adaptive Very Fast Decision Tree, preliminary results. in 5th Swedish Workshop in Data Science (SweDS 2017), December 2017, Gothenburg, Sweden.
- · García-Martín E., Lavesson N., & Grahn H, Energy Efficiency in Machine Learning. (2016) 4th Swedish Workshop on Data Science (SweDS 2016).

#### PROFESSIONAL SERVICE

Organizer, ECML-PKDD Workshop on "Energy Efficient Data Mining and Knowledge Discovery", 2018. https://greendatamining.github.io

Co-organizer, Women in Machine Learning Dinner at International Conference on Machine Learning (ICML) 2018, Stockholm, Sweden.

**Program Committee Member**, Workshop on Container-based Systems for Big Data, Distributed and Parallel computing at the 24TH International European Conference On Parallel and Distributed Computing. 2018.

Program Committee Member, Grace Hooper Celebration (GHC), 2018, 2019.

Reviewer, International Conference on Machine Learning (ICML), 2018.

Reviewer, Women in Machine Learning Workshop, 2016, 2017.

Volunteer, Women in Machine Learning Workshop, 2016, 2017.

Volunteer, Annual Workshop of the Swedish Artificial Intelligence Society SAIS. 2017.

Reviewer, European Conference on Machine Learning (ECML-PKDD), 2016.

Reviewer, Neural Information Processing Systems (NIPS), 2016.

Reviewer, Association for the Advancement of Artificial Intelligence (AAAI), 2016.

Reviewer, International workshop on Machine Learning, Optimization and Big Data (MOD), 2016.

Reviewer, Social Network Analysis and Mining (SNAM), 2016.

Reviewer, Lecture Notes in Social Networks (LNSN), 2016.

### **TEACHING**

**Co-Instructor**, Machine Learning (DV2542). Department of Computer Science and Engineering, Blekinge Institute of Technology, Karlskrona, Sweden. 2015, 2016, 2017.

**Teaching Assistant**, C Programming (DV1550). Department of Computer Science and Engineering, Blekinge Institute of Technology, Karlskrona, Sweden. 2015, 2016, 2017.

**Teaching Assistant**, Agent Systems (DV2541). Department of Computer Science and Engineering, Blekinge Institute of Technology, Karlskrona, Sweden. 2015, 2016, 2017.

## COMPUTER SKILLS

GitHub profile: https://github.com/egarciamartin

Python, Java, C, Git, Bash, Vim, R.

Linux, OSX.

#### REFERENCES

Provided upon request.