

CURRICULUM VITAE OF ERIK DAXBERGER

September 2021

PERSONAL DETAILS

Department of Engineering
University of Cambridge
Trumpington Street
Cambridge CB2 1PZ
United Kingdom

Phone: +44 7845008779
E-Mail: ead54@cam.ac.uk
Web: edaxberger.github.io
Google Scholar: [link](#)
Twitter: [@edaxberger](#)



EDUCATION

| | |
|---|-------------|
| PhD in Engineering <i>University of Cambridge, Cambridge, UK (~3 years), and Max Planck Institute for Intelligent Systems, Tübingen, Germany (~1 year)</i> | 2019 - 2023 |
| MSc in Computer Science (with distinction) – 5.77/6.00 (top 7.5%) <i>ETH Zürich, Zurich, Switzerland</i> | 2017 - 2019 |
| BSc in Computer Science – 1.00/1.00 (top 5%) BSc in Media Informatics – 1.05/1.00 (top 5%) <i>Ludwig-Maximilians-Universität, Munich, Germany spent a year at the National University of Singapore, Singapore</i> | 2013 - 2017 |
| Abitur (German matriculation exam) – 1.0/1.0 (top 2%) | 2013 |

RESEARCH EXPERIENCE

| | |
|---|---|
| Approximate Bayesian Inference Team <i>RIKEN Center for Advanced Intelligence Project</i> Research on continual deep learning (Advisor: Emtiyaz Khan). | Aug 2020 - now <i>Tokyo, Japan (remotely)</i> |
| Machine Learning Group <i>University of Cambridge, Department of Engineering</i> Research on probabilistic modeling & deep learning (Advisor: José Miguel Hernández-Lobato). | Feb 2019 - now <i>Cambridge, UK</i> |
| Learning and Adaptive Systems Group <i>ETH Zürich, Department of Computer Science</i> Research on discrete and mixed-variable Bayesian optimization (Advisor: Andreas Krause). | Jan 2018 - Feb 2019 <i>Zurich, Switzerland</i> |
| Machine Intelligence Group <i>Siemens AG, Corporate Technology</i> Research on statistical relational learning (Advisor: Volker Tresp). | Apr 2017 - Aug 2017 <i>Munich, Germany</i> |
| Multi-Agent Planning, Learning, and Coordination Group <i>National University of Singapore, School of Computing</i> Research on batch Bayesian optimization (Advisor: Bryan Kian Hsiang Low). | Aug 2015 - May 2016 <i>Singapore</i> |

PUBLICATIONS

(* denotes equal contribution)

JOURNAL PAPERS

1. Yunpu Ma, Volker Tresp, **Erik A. Daxberger** (2018). “[Embedding Models for Episodic Knowledge Graphs](#)”. In *Journal of Web Semantics*.

REFEREED CONFERENCE PROCEEDINGS

1. **Erik Daxberger***, Agustinus Kristiadi*, Alexander Immer*, Runa Eschenhagen*, Matthias Bauer, Philipp Hennig (2021). “[Laplace Redux – Effortless Bayesian Deep Learning](#)”. In *Proceedings of the 35th Conference on Neural Information Processing Systems (NeurIPS 2021)* [26% Acceptance Rate].
2. **Erik Daxberger**, Eric Nalisnick*, James Urquhart Allingham*, Javier Antorán*, José Miguel Hernández-Lobato (2021). “[Bayesian Deep Learning via Subnetwork Inference](#)”. In *Proceedings of the 38th International Conference on Machine Learning (ICML 2021)* [21.5% Acceptance Rate].
3. Austin Tripp*, **Erik Daxberger***, José Miguel Hernández-Lobato (2020). “[Sample-Efficient Optimization in the Latent Space of Deep Generative Models via Weighted Retraining](#)”. In *Proceedings of the 34th Conference on Neural Information Processing Systems (NeurIPS 2020)* [20.1% Acceptance Rate].
4. **Erik Daxberger***, Anastasia Makarova*, Matteo Turchetta, Andreas Krause (2020). “[Mixed-Variable Bayesian Optimization](#)”. In *Proceedings of the 29th International Joint Conference on Artificial Intelligence (IJCAI 2020)* [12.6% Acceptance Rate].
5. **Erik A. Daxberger**, Bryan Kian Hsiang Low (2017). “[Distributed Batch Gaussian Process Optimization](#)”. In *Proceedings of the 34th International Conference on Machine Learning (ICML 2017)* [25.5% Acceptance Rate].

WORKSHOP PAPERS

1. **Erik Daxberger**, Eric Nalisnick*, James Urquhart Allingham*, Javier Antorán*, José Miguel Hernández-Lobato (2020). “[Expressive yet Tractable Bayesian Deep Learning via Subnetwork Inference](#)”. In *3rd Symposium on Advances in Approximate Bayesian Inference (AABI 2020)*, **Contributed Talk** [10/60 Accepted Papers].
2. Austin Tripp*, **Erik Daxberger***, José Miguel Hernández-Lobato (2020). “[Sample-Efficient Optimization in the Latent Space of Deep Generative Models via Weighted Retraining](#)”. In *Workshop on Real World Experiment Design and Active Learning at the 37th International Conference on Machine Learning (RealML @ ICML 2020)*.
3. **Erik Daxberger**, José Miguel Hernández-Lobato (2019). “[Bayesian Variational Autoencoders for Unsupervised Out-of-Distribution Detection](#)”. In *4th Workshop on Bayesian Deep Learning at the 33rd Conference on Neural Information Processing Systems (BDL @ NeurIPS 2019)*, **Spotlight** [15/100 Accepted Papers].

HONOURS AND AWARDS

- NeurIPS, ICML & ICLR Outstanding Reviewer Recognitions** 2020/2021
Awarded for being among the top 10% of reviewers for NeurIPS 2020, among the top 33% of reviewers for ICML 2020, and among the top 12% of reviewers for ICLR 2021.
- College Senior Scholarship** 2019 & 2020
Awarded by Fitzwilliam College, University of Cambridge, "to the highest performing PhD students [...] in recognition of excellent intellectual achievement".
- Graduate Travel and Research Funding Award** 2019
Awarded by the Fitzwilliam Society Trust Research Fund for visiting NeurIPS 2019.
- Cambridge-Tübingen PhD Fellowship in Machine Learning** 2019 - 2022
Full scholarship for a PhD in Machine Learning jointly at the University of Cambridge, Cambridge, UK, and the Max Planck Institute for Intelligent Systems, Tübingen, Germany.
(*With generous donations from Google DeepMind.*)
- Qualcomm European Research Studentship and EPSRC Studentship** 2019 - 2022
Full scholarship for a PhD in Engineering at the University of Cambridge.
- Honorary Cambridge European Scholarship** 2019 - 2022
Awarded by the [Cambridge Commonwealth, European & International Trust](#).
- German National Merit Foundation Scholarship** 2018 - 2019
(*Studienstiftung des deutschen Volkes*)
Awarded to the top 0.5% of students nationwide.
- LMU Research Award for Excellent Students** 2017
Awarded yearly to the 10 best research projects university-wide at LMU (Bachelor & Master).
- ICML Travel Award, DStatG Travel Award and Lehre@LMU Research Grant** 2017
Awarded by the International Machine Learning Society, the German Statistical Society, and LMU, respectively, for visiting ICML 2017. Full coverage of travel, living and conference expenses.
- LMUexchange Scholarship and PROSA Scholarship** 2015 - 2016
Awarded by LMU and the German Academic Exchange Service (DAAD). Full coverage of tuition fees and partial coverage of travel and living expenses for a student exchange at NUS.

TEACHING EXPERIENCE

- Inference** Lent Term 2020 & Lent Term 2021
Supervisor and Demonstrator, Department of Engineering, University of Cambridge
- Machine Learning Project** Easter Term 2019
Demonstrator, Department of Engineering, University of Cambridge

Computer Science I for Electrical Engineers
Teaching Assistant, Department of Computer Science, ETH Zurich

Autumn Term 2017/18

Algorithms and Data Structures
Teaching Assistant, Department of Computer Science, LMU Munich

Summer Term 2015

Introduction to Programming
Teaching Assistant, Department of Computer Science, LMU Munich

Winter Terms 2014/15 and 2016/17

PROFESSIONAL SERVICE

- *Reviewer*, Journal of Machine Learning Research (**JMLR**)
- *Reviewer*, 35th Conference on Neural Information Processing Systems (**NeurIPS 2021**)
- *Reviewer*, 38th International Conference on Machine Learning (**ICML 2021**)
- *Reviewer*, Ninth International Conference on Learning Representations (**ICLR 2021**)
- *Reviewer*, 24th International Conference on AI and Statistics (**AISTATS 2021**)
- *Reviewer*, 35th AAAI Conference on Artificial Intelligence (**AAAI 2021**)
- *Reviewer*, 34th Conference on Neural Information Processing Systems (**NeurIPS 2020**)
- *Reviewer*, 37th International Conference on Machine Learning (**ICML 2020**)
- *Reviewer*, 23rd International Conference on AI and Statistics (**AISTATS 2020**)
- *Reviewer*, 34th AAAI Conference on Artificial Intelligence (**AAAI 2020**)
- *Volunteer*, 34th Conference on Neural Information Processing Systems (**NeurIPS 2020**)
- *Volunteer*, 37th International Conference on Machine Learning (**ICML 2020**)
- *Volunteer*, Eighth International Conference on Learning Representations (**ICLR 2020**)
- *Volunteer*, 33rd Conference on Neural Information Processing Systems (**NeurIPS 2019**)
- *Volunteer*, [Machine Learning Summer School 2020](#), by the Max Planck Institute for Intelligent Systems, Tübingen, Germany (**MLSS 2020**)