

Lars Ødegaard Bentsen

Curriculum Vitae

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Education

- 2023 (Expected) **Ph.D. - University of Oslo**, Department of Technology Systems
Machine Learning Applied to Wind-Based Energy Production
- 2020 **M.Eng. – Durham University**
General Engineering with Specialisation in New and Renewables/Electrical Engineering
First Class with Honours (77.3%), equivalent to A in Norwegian curriculum.
- 2016 **Upper Secondary – Oslo Commerce School**
6 (equivalent to A*) in all STEM related electives throughout

Publications

- Bentsen, Lars Ødegaard**, Narada Dilp Warakagoda, Roy Stenbro, and Paal Engelstad (2022). "Spatio-temporal wind speed forecasting using graph networks and novel Transformer architectures." *Applied Energy*. Vol. 333, 2023. doi: 10.1016/j.apenergy.2022.120565
- Bentsen, Lars Ødegaard**, Narada Dilp Warakagoda, Roy Stenbro, and Paal Engelstad (2022). "Probabilistic Wind Park Power Prediction using Bayesian Deep Learning and Generative Adversarial Networks." *Journal of Physics: Conference Series*. Vol. 2362. No. 1. IOP Publishing, 2022. doi: 10.1088/1742-6596/2362/1/012005
- Bentsen, Lars Ødegaard**, Simionato, Riccardo; Wallace, Benedikte & Krzyzaniak, Michael Joseph (2022). "Transformer and LSTM Models for Automatic Counterpoint Generation using Raw Audio.", *Proceedings of the SMC Conferences*. ISSN 2518-3672. doi: 10.5281/zenodo.6572847
- Bentsen, Lars Ødegaard**, Narada Dilp Warakagoda, Roy Stenbro, and Paal Engelstad (2022). "Wind Park Power Prediction: Attention-Based Graph Networks and Deep Learning to Capture Wake Losses.", *Journal of Physics: Conference Series*, vol. 2265, no. 2, p. 022035. IOP Publishing, 2022. doi:10.1088/1742-6596/2265/2/022035

Awards and Additional Experience

- DeepWind Conference 2022 **Best Scientific Content Award:** Probabilistic Wind Park Power Prediction using Bayesian Deep Learning and Generative Adversarial Networks
- Durham University **Awards:** Outstanding Achievement L4 Engineering
M.Eng. R&D Project (Master's Thesis): Statistical machine learning to determine the socio-economic drivers behind EV charging in the Netherlands. Mark: First - 81%.
L3 Engineering Design: Developed medical laboratory equipment for testing light activated drugs for cancer treatment with an industry client, LightOx. One of few groups provided additional funding to further develop and prototype our design.
Durham University Electric Motorsport: Worked as an engineer with UK's leading solar car team.
Hatfield College Rowing Club: Rowed for the first and second 8 in various regattas throughout the UK.
- Oslo Commerce School Academically selected to partake in a four-month exchange program to Bath, UK.

Work Experience

2020 – 2023 (Expected Oct)	University of Oslo – Doctoral Research Fellow	Oslo, Norway
2019	Vacational Studies – Director (joint): Appointed to co-director of Vacation Studies for a few months, interviewing for teacher positions and making decisions on future directions for the company, before deciding to pursue work in more technical areas.	Newbury, UK
2019	Vodafone – Summer Internship, Technology: Developed a new tool for managing new product development projects within the customer program delivery team	Newbury, UK
2018 – 2019	Mentor Norway – Teacher: Maths/Physics lessons for students in upper-secondary education	Online
2018	Oslo Summer School – Assistant Teacher	Oslo, Norway
2016 – 2019	Godt Brød – Coffee Barista: Worked as a coffee barista	Oslo, Norway
2014 – 2015	Lyn Ski – Ski Instructor: Cross-country skiing instructor for young children	Oslo, Norway
2014 – 2015	Oksnøen Summer Camp – Staff	Råde, Norway

Presentations

March 2023 (Expected)	Lillestrøm Public Library: Machine learning to optimise power production of offshore wind turbines
February 2023 (Expected)	dScience Lunch Seminar – University of Oslo: Machine Learning Applied to Wind Energy; with a special focus on time-series forecasting
November 2022	Nordic AI Meet 2022 Conference – Oslo, Norway: Probabilistic Wind Park Power Prediction using Bayesian Deep Learning and Generative Adversarial Networks
June 2022	Sound and Music Computing Conference – Saint-Étienne, France: Transformer and LSTM Models for Automatic Counterpoint Generation using Raw Audio
June 2022	Torque 2022 Conference – Delft, Netherlands: Attention-Based Graph Networks and Deep Learning to Capture Wake Losses.
January 2022	DeepWind 2022 Conference – Trondheim, Norway: Probabilistic Wind Park Power Prediction using Bayesian Deep Learning and Generative Adversarial Networks

Reviewer

2023	Northern Lights Deep Learning (NLDL) Conference 2023 – Tromsø, Norway
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Personal Interests and Skills

Certifications	Driver's Licence Class AM and B Boating Licence (Up to 15m) Certified Underwater Hunter and Freediver PADI Open Water Diver
Interests	Guitar, Snowboarding/Skiing, Cooking, Travelling, Various water-based activities and always open to explore new interests!