

# Lars Ødegaard Bentsen

Curriculum Vitae

Email: lars.nbe@hotmail.com  
Website: larsbentsen.github.io  
LinkedIn: linkedin.com/in/bentsenlars

## Education

- 2023 (Expected) **Ph.D. - University of Oslo**, Department of Technology Systems  
Deep 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 (2024). «Relative evaluation of probabilistic methods for spatio-temporal wind forecasting”. *Journal of Cleaner Production*. Vol. 434, p.139944. doi: 10.1016/j.jclepro.2023.139944
- Bentsen, Lars Ødegaard**, Narada Dilp Warakagoda, Roy Stenbro, and Paal Engelstad (2023). "A Unified Graph Formulation for Spatio-Temporal Wind Forecasting”, *Energies* 16.20 (2023): 7179. doi: 10.3390/en16207179
- Bentsen, Lars Ødegaard**, Narada Dilp Warakagoda, Roy Stenbro, and Paal Engelstad (2023). "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. We were 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 VIII in various regattas throughout the UK.

Oslo Commerce School      Academically selected to partake in a four-month exchange program to Bath, UK.

## Work Experience

2023 – Present	<b>BearingPoint:</b> Data Science Consultant – Data Science and AI	Oslo, Norway
2020 – 2023	<b>University of Oslo – Doctoral Research Fellow</b>	Oslo, Norway
2019	<b>Vodafone – Summer Internship, Technology:</b> Developed a new tool for managing new product development projects within the customer program delivery team.	Newbury, UK
2018 – 2019	<b>Mentor Norway – Teacher:</b> Maths/Physics lessons for upper-secondary education.	Online
2018	<b>Oslo Summer School – Assistant Teacher</b>	Oslo, Norway
2016 – 2019	<b>Godt Brød – Certified Coffee Barista</b>	Oslo, Norway
2014 – 2015	<b>Lyn Ski – Ski Instructor:</b> Cross-country skiing instructor for children. Two seasons.	Oslo, Norway
2014 – 2015	<b>Oksnøen Summer Camp – Staff:</b> Two summers.	Råde, Norway

## Selected Presentations

October 2023	<b>Department of Technology Systems – University of Oslo:</b> Discussed the department's research and future opportunities on <i>AI in Energy Systems</i> with parliamentary representatives from the Norwegian Conservative Party (Høyre) and senior management from the faculty.
March 2023	<b>Lillestrøm Public Library:</b> Artificial intelligence to optimise power production for offshore wind turbines
February 2023	<b>dScience Lunch Seminar – University of Oslo:</b> Using machine learning to improve energy utilisation for offshore wind turbines
November 2022	<b>Nordic AI Meet 2022 Conference – Oslo, Norway:</b> Probabilistic Wind Park Power Prediction using Bayesian Deep Learning and Generative Adversarial Networks
July 2022	<b>RAVE Consortium Meeting – Hamburg, Germany (+Online):</b> Probabilistic Wind Park Modelling on the RAVE dataset for the Alpha Ventus Wind Farm.
June 2022	<b>Sound and Music Computing Conference – Saint-Étienne, France:</b> Transformer and LSTM Models for Automatic Counterpoint Generation using Raw Audio

## Reviewer

2024	<b>Elsevier - Journal of Cleaner Production</b>
2023	<b>Northern Lights Deep Learning (NLDL) Conference 2024 – Tromsø, Norway</b>
2023	<b>Elsevier – Transportation Research Part C: Emerging Technologies</b>
2023	<b>Northern Lights Deep Learning (NLDL) Conference 2023 – Tromsø, Norway</b>

## Skills

Programming	Python (Tensorflow, Pytorch, Scikit learn, Pandas, LangChain, etc.), C++, MatLab, R, CSS/HTML, C#
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Infrastructure/  
Version control      Azure, Docker, Git, Terraform, Poetry/venv/conda

Machine Learning      Most basic ML technologies, GNNs, time-series data, Transformers, prompting LLMs.

## Personal Interests and Skills

Certifications      **Driver's Licence Class AM and B**  
**Boating Licence (Up to 15m)**  
**Certified Underwater Hunter and Free Diver**  
**PADI Open Water Diver**

Interests      **Guitar, Snowboarding/Skiing, Cooking, Travelling, Various water-based activities and always open to explore new interests!**