# Aliaksandr Hubin

*Curriculum Vitae with Track Record*

+47 451 71 361
aliaksandr.a.hubin@gmail.com
https://aliaksah.github.io/portfolio/
0000-0002-3244-6571

## Personal Information

| | |
|---|---|
| Nationality | Norwegian |
| Languages | Norwegian, English, Belarusian, Russian |
| Active Daily Programming Languages | R, Python, Latex |
| Passive Programming Languages | C++, C#, Java, Wolfram Mathematica, Visual Basic, html, Assembler |
| Scholar | `https://scholar.google.com/citations?user=Lx-G8ckAAAAJ&hl` |

## Education

2018 **PhD, Statistics**, *University of Oslo*, Norway

2014 **Master's, Operations Research**, *Molde University College*, Norway

2013 **Specialist's, Applied mathematics and computer science**, *Belarusian State University*, Belarus

## Current Positions

2022–Present **Associate Professor in Statistics**, *Norwegian University of Life Sciences*, Norway

2022–Present **Associate Professor in Statistics**, *University of Oslo*, Norway

## Previous Positions

2022–2025 **Associate Professor in Statistics**, *Østfold University College*, Norway

2021–2025 **Head of Oslo Section**, *Norwegian Statistical Association*, Norway (voluntary)

2021–2022 **Postdoc**, *University of Oslo*, Norway

2018–2020 **Researcher/Senior Researcher**, *Norwegian Computing Center*, Norway

2014–2018 **PhD Candidate**, *University of Oslo*, Norway

2011–2012 **Junior quant analyst**, *CompatibL, `https://www.compatibl.com/about-compatibl/`*, Minsk

## Fellowships, Awards, and Prizes

2022 ISBA Young Researcher Travel Award funded by Google DeepMind.

2017 Poster Competition Award, Graybill Conference for "A novel algorithmic approach to Bayesian logic regression".

2017 Norbis international travel grant for the 3 months stay at the Medical University of Vienna, Austria

2014 The NIMA Award for Best MSc Graduate at Molde University College.

2013 Belarusian State University. Faculty of Applied Mathematics and Computer Science first award for student research in the scope of "Probabilistic and statistical models and methods".

## Supervision of Graduate Students and Research Fellows

### Completed Master's Students

2024–2025 **Sigurd Myhre Vittersø**: Department of Mathematics, University of Oslo, Norway

2024–2025 **Sander Finnset Ørnes**: Department of Mathematics, University of Oslo, Norway

2024–2025 **Kristoffer Solli Larsen**: Department of Mathematics, University of Oslo, Norway

2024–2025 **Ylva Sofie Tollefsen**: Department of Mathematics, University of Oslo, Norway

2023–2024 **Eirik Høyheim**: REALTEK, NMBU, Ås, Norway

2022–2023 **Philip S. Hauglie Sommerfelt**: Department of Mathematics, University of Oslo, Norway

2022–2023 **Leif-Martin Sæther Sunde**: Department of Mathematics, University of Oslo, Norway

2022–2023 **Hermann Ellingsen**: REALTEK, NMBU, Ås, Norway

2022–2023 **Osama Abidi**: REALTEK, NMBU, Ås, Norway

2021–2022 **Lars Skaaret-Lund**: Department of Mathematics, University of Oslo, Norway

2020–2021 **Jon Lachmann**: Department of Statistics, Stockholm University, Sweden

2020–2021 **Elke Bruns**: Department of Mathematics, University of Vienna, Austria

### Current Master's Students (Completing in 2025)

2025 **Sam Fakhraee**: KBM, NMBU, Ås, Norway

### Current PhD Students

2022-present **Lars Skaaret-Lund** (NMBU): Scalable and interpretable inference in Bayesian deep learning. Main supervisor.

2023-present **Andreas Massey** (NMBU): Bioinspired AI with spiking neural networks. Main supervisor.

### Teaching Activities

2026 **STAT340 - Applied Methods in Statistics**, *Norwegian University of Life Sciences (NMBU)*

2024-2025 **STIN300 - Statistical Programming in R**, *Norwegian University of Life Sciences (NMBU)*

2022 **STK2100 - Machine Learning and Statistical Methods for Prediction and Classification**, *University of Oslo*

2022 **STK-MAT2011 - Project Work in Finance, Insurance, Risk, and Data Analysis**, *University of Oslo*

2018 **STK4900 - Statistical Methods and Applications**, *University of Oslo*

2016–2017 **STK3100 - Introduction to Generalized Linear Models**, *University of Oslo*

2015–2017 **STK2130 - Modeling by Stochastic Processes**, *University of Oslo*

### Pedagogical Training

2008–2012 **Basics of Psychology and Pedagogics:** Completed a 68-hour course as part of undergraduate education. *Belarusian State University, Faculty of Applied Mathematics and Computer Science.*

2023 **Introductory Module in University Pedagogy:** A 120-hour course covering foundational topics in university-level pedagogy. *University of Oslo.*

2023 **Research Supervision:** A 30-hour module focused on developing supervisory skills for research students. *University of Oslo.*

2024 **Development Work for University Pedagogy:** A 50-hour advanced module on pedagogical development. *University of Oslo.*

## Statistical Consulting Service

2022–Present Norwegian University of Life Sciences

2022–2025 Østfold University College

2022–Present Lovisenberg Diaconal College

*Supervised over 50 projects; 5 several articles accepted or published, 6 in in review, several being finalized.*

### Editorial Activities

2025–Present **International Conference on Machine Learning - area chair**

### Reviewing Activities

2025–Present **R journal**

2024–Present **Uncertainty in Artificial Intelligence**

2023–Present **Natural Language Engineering**

2023–Present **European Young Statisticians Meetings**

2023–Present **Journal of Computational and Graphical Statistics**

2022–Present **Statistical Methods in Medical Research**

2022–Present **Computational Statistics and Data Analysis**

2022–Present **Hacettepe Journal of Mathematics and Statistics**
2021–Present **Annals of Applied Statistics**
2021–Present **Computational Statistics**
2021–Present **Environmental and Ecological Statistics**
2019–Present **Annual Meetings of Association of Computational Linguistics**
2019–Present **Empirical Methods for Natural Language Processing**
2019–Present **Journal of the American Statistical Association**
2018–Present **Scandinavian Journal of Statistics**
2016–Present **Scientific Reports**

## Organisation of Meetings and Conferences

2026 **Nordstat 2026**, *Finland*, Member of international scientific committee
2026 **IWSM 2026**, *Norway*, Co-organiser, member of scientific commitee
2024 **NSF 24 Norwegian Statisticians Meeting**, *Norway*, Chair of the organizing committee
2023 **European Young Statisticians Meeting**, *Slovenia*, Member of international scientific committee
2022–Present **Statistical Evenings, NSF Oslo**, *Norway*
2021–2024 **Seminars in Statistics and Data Science, University of Oslo**, *Norway*

## Institutional Responsibilities

2020 Committee Member, PhD Defense of Kirill Neklyudov at Higher School of Economics (HSE), currently Assistant Professor at the University of Montreal and a Core Academic Member at Mila - Quebec.

## Memberships

2015–Present NORBIS, National Research School in Bioinformatics, Biostatistics, and Systems Biology.
2017–Present Norwegian Statistical Association (Chair of Oslo Regional Section).
2021–Present International Society for Bayesian Analysis (ISBA).
2021–Present Statistical Modelling Society.

## Track Record

Publications Over **40** articles, with **562** citations on Google Scholar as of January 2026.

2026 **Explainable Bayesian deep learning through input-skip Latent Binary Bayesian Neural Networks**, E Høyheim, L Skaaret-Lund, S Sæbø, A Hubin. *Accepted to Journal of Artificial Intelligence Research*

2026 **Association Between Regional Labour Analgesia And Neonatal Heart Rate Immediately After Birth**, LN Kvenshagen, HN Kvenshagen, H Kari, A Flem Jacobsen, K Størdal, A Hubin, AL Solevåg. *Accepted to Neonatology*

2026 **The Role of Voice and Silence Behaviors in Software Development: A Structural Equation Modeling Analysis**, M Sánchez-Gordón, R Colomo-Palacios, AS Gordon, A Hubin. *Information and Software Technology*

2026 **Demystifying Knowledge Hiding in Software Testing: Insights from Practitioners** , M Sánchez-Gordón, R Colomo-Palacios, K Gama, A Hubin. *Accepted to Proceedings of ICSE-SEIS 2026*

2025 **Bayesian Generalized Nonlinear Models Offer Basis Free SINDy With Model Uncertainty**, A Hubin. *Proceedings of International Workshop on Statistial Modelling 2025.*

2025 **The effect of exercise-based rehabilitation on objective physical activity levels in patients with persistent dyspnoea following pulmonary embolism**, SM Haukeland-Parker, HH Johannessen, W Ghanima, M Tavoly, A Hubin, et al. *Thrombosis Research.*

2025 **The Effect of Stereotypes on Perceived Competence of Indigenous Software Practitioners: A Study of Dress Style in Professional Photos**, M Sánchez-Gordón, R Colomo-Palacios, C Guevara-Vega, A Quiña-Mera, A Hubin. *Empirical Software Engineering.*

2025 **External validation of the DAYS score for suspected deep vein thrombosis**, TD Halstensen, C Hardeland, W Ghanima, VA Grøndahl, A Hubin, et al. *Research and Practice in Thrombosis and Haemostasis.*

2025 **Safety of Heavy Resistance Exercise During Pregnancy and Postpartum: A Controlled, Prospective Cohort Study**, T Fostervold Mathisen, A Hubin, M Mountjoy, J Sundgot-Borgen. *Accepted to Women in Sport and Physical Activity Journal.*

2024 **Sparsifying Bayesian neural networks with latent binary variables and normalizing flows**, L Skaaret-Lund, G Storvik, A Hubin. *Transactions on Machine Learning Research (TMLR)*, 1-32.

2024 **Outlier Detection in Bayesian Neural Networks: Exploring Pre-activations and Predictive Entropy**, H Ellingsen, A Hubin, F Remonato, S Sæbø. *Nordic Machine Intelligence (NMI)*, 4 (1), 1-15.

2024 **Contributed Discussion of Sparse Bayesian factor analysis when the number of factors is unknown by Frühwirth-Schnatter, Hosszejni, and Lopes**, WRP Denault, A Hubin, V Vitelli, S Richardson. *Bayesian Analysis*, 1 (1), 109-112.

2024 **Evolutionary variational inference for Bayesian generalized nonlinear models**, PSH Sommerfelt, A Hubin. *Neural Computing and Applications*, 36 (33), 21023-21040.

2024 **Development and internal validation of a simple clinical score for the estimation of the probability of deep vein thrombosis in outpatient emergency department patients**, TD Halstensen, C Hardeland, W Ghanima, VA Grøndahl, A Hubin, et al. *Research and Practice in Thrombosis and Haemostasis*, 102608.

2024 **Motor effects of fentanyl in isoflurane-anaesthetized pigs and the subsequent effect of ketanserin or naloxone**, N Digranes, E Hoeberg, A Lervik, A Hubin, J Nordgreen, HA Haga. *Veterinary Anaesthesia and Analgesia*, 51 (5), 491-499.

2024 **Effects of dietary fish to rapeseed oil ratio on steatosis symptoms in Atlantic salmon (Salmo salar L) of different sizes**, D Siciliani, A Hubin, B Ruyter, EM Chikwati, VG Thunes, EC Valen, et al. *Scientific Reports*, 14 (1), 18006.

2024 **Sparse Bayesian Neural Networks: Bridging Model and Parameter Uncertainty through Scalable Variational Inference**, A Hubin, G Storvik. *Mathematics*, 12 (6), 788.

2024 **Incorporating probabilistic domain knowledge into deep multiple instance learning**, GS Al Hajj, A Hubin, C Kanduri, M Pavlovic, KD Rand, M Widrich, et al. *Proceedings of Machine Learning Research (PMLR)*, ICML 2024, 235, p. 17279–17297.

2024 **Position: Bayesian Deep Learning is Needed in the Age of Large-Scale AI**, T Papamarkou, M Skoularidou, K Palla, L Aitchison, J Arbel, D Dunson, A Hubin, et al. *Proceedings of Machine Learning Research (PMLR)*, ICML 2024, 235, p. 39556–39586.

2023 **Subsampling MCMC for Bayesian Variable Selection and Model Averaging in BGNLM**, J Lachmann, A Hubin. *Proceedings of EYSM 2023.*

2023 **Fractional Polynomials Models as Special Cases of Bayesian Generalized Nonlinear Models**, A Hubin, G Heinze, R De Bin. *Fractal and Fractional*, 7 (9).

2022 **Prior distributions expressing ignorance about convex increasing failure rates**, J Gåsemyr, A Hubin. *Scandinavian Journal of Statistics.*

2022 **On a genetically modified mode jumping MCMC approach for multivariate fractional polynomials**, A Hubin, R De Bin. *Proceedings of the 36th International Workshop on Statistical Modelling.*

2022 **A subsampling approach for Bayesian model selection**, J Lachmann, G Storvik, F Frommlet, A Hubin. *International Journal of Approximate Reasoning.*

2021 **Reversible Genetically Modified Mode Jumping MCMC**, A Hubin, F Frommlet, G Storvik. *Proceedings of 22nd European Young Statisticians Meeting*, ISBN 978-960-7943-23-1.

2021 **skweak: Weak Supervision Made Easy for NLP**, P Lison, J Barnes, A Hubin. *Proceedings of The Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics*, p. 337–346.

2021 **Flexible Bayesian Nonlinear Model Configuration**, A Hubin, G Storvik, F Frommlet. *Journal of Artificial Intelligence Research*, 72, p. 901–942.

2020 **Named Entity Recognition without Labelled Data: A Weak Supervision Approach**, P Lison, J Barnes, A Hubin, S Touileb. *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, p. 1518–1533.

2020 **A Bayesian binomial regression model with latent Gaussian processes for modelling DNA methylation**, A Hubin, G Storvik, P Grini, M Butenko. *Austrian Journal of Statistics*, 49 (4), 46–56.

2020 **Rejoinder for the discussion of the paper "A Novel Algorithmic Approach to Bayesian Logic Regression"**, A Hubin, G Storvik, F Frommlet. *Bayesian Analysis*, 15 (1), 312–333.

2020 **A novel algorithmic approach to Bayesian Logic Regression**, A Hubin, G Storvik, F Frommlet. *Bayesian Analysis*, 15 (1), 263–311.

2019 **An adaptive simulated annealing EM algorithm for inference on non-homogeneous hidden Markov models**, A Hubin. *Proceedings of the International Conference on Artificial Intelligence*.

2019 **Combining model and parameter uncertainty in Bayesian neural networks**, A Hubin, G Storvik. *Technical report*, doi: 10.48550/arXiv.1903.07594.

2019 **FinAI: Scalable techniques to stock price time series modelling**, A Hubin, K Aas. *Norsk Regnesentral*, nr.no/publikasjon/1755261/.

2019 **Bayesian binomial regression model with a latent Gaussian field for analysis of epigenetic data**, A Hubin, G Storvik, P Grini, M Butenko. *Computer Data Analysis and Modeling: Stochastics and Data Science*.

2018 **Mode jumping MCMC for Bayesian variable selection in GLMM**, A Hubin, G Storvik. *Computational Statistics & Data Analysis*.

2016 **Estimating the marginal likelihood with Integrated nested Laplace approximation (INLA)**, A Hubin, G Storvik. *Technical report*, doi.org/10.48550/arXiv.1611.01450.

2016 **On Mode Jumping in MCMC for Bayesian Variable Selection within GLMM**, A Hubin, G Storvik. *Computer Data Analysis and Modeling: Theoretical and Applied Stochastics*.

2016 **Efficient mode jumping MCMC for Bayesian variable selection in GLMM**, A Hubin, G Storvik. *Technical report*, doi.org/10.48550/arXiv.1604.06398.

2013 **Evaluation of the effectiveness of the Black-Litterman model in the presence of heterogeneous investor expectations**, A Hubin. *Proceedings of the 70th scientific conference of students and graduates.*

2013 **Development of a multifunctional software product for optimal portfolio investment**, A Hubin. *Proceedings of the 69th scientific conference of students and graduates.*

## Released software

2025 **LBBNN: Latent Binary Bayesian Neural Networks Using 'torch'**, L Skaaret-Lund, E Høyheim, A Hubin. *CRAN*, https://cran.r-project.org/web/packages/LBBNN/LBBNN.pdf.

2024 **EMJMCMC: Evolutionary Mode Jumping Markov Chain Monte Carlo Expert Toolbox**, A Hubin, W Leoncio, G Storvik, F Frommlet. *CRAN*, https://cran.r-project.org/web/packages/EMJMCMC/EMJMCMC.pdf.

2023 **FBMS: Flexible Bayesian Model Selection and Model Averaging**, J Lachmann, A Hubin, F Frommlet, G Storvik. *CRAN*, https://cran.r-project.org/web/packages/FBMS/FBMS.pdf.

2020 **skweak: Weak supervision for NLP**, P Lison, J Barnes, A Hubin. *spacy*, https://spacy.io/universe/project/skweak.

2019 **depmixS4pp: An Adaptive Simulated Annealing EM Algorithm for Inference on Non-homogeneous Hidden Markov Models**, A Hubin. *github*, https://github.com/aliaksah/depmixS4pp.

## Research Monographs

2018 **PhD Thesis:** Bayesian model configuration, selection and averaging in complex regression contexts.

2014 **Master Thesis:** Evaluation of supply vessel schedules robustness with a posteriori improvements.

2013 **Specialist Thesis:** Methods and tools of investment management in conditions of international diversification.

## Participation in Industrial Innovation

2018–2020 **BIA Project:** Collaboration between Norwegian Computing Center and Exabel.

2019–2020 **BIGINSIGHT Project:** Collaboration between Norwegian Computing Center and DNB.

## Funding and Applicatios

2025 **VET internal funding, NMBU:** Fully funded 3 years PhD position the student I will co-supervise. Under consideration.

2024 **BONXAI:** Research Council of Norway (PI, Submitted).

2023 **KBM internal funding, NMBU:** Fully funded 3 years PhD position the student I co-supervise. Secured.

2023 **Statistical Neural Nets:** Science Foundation Ireland (collaboration partner, in revision).

2022 **Bayesian Methods and Application:** Research Council of Austria.

2022 **KBM internal funding, NMBU:** Fully funded 3 years PhD position for my student. Secured.

2021 **GradDeepSki:** Backtracking gradient descent, deep learning, and skin cancer.

2020 **Equinor project:** Full funding for a 3 years postdoc position. Equinor scheme, Secured

2019–2021 **DeepBayes:** Bayesian deep learning - uncertainty, scalability, and sparsification (RCN, young CAS).

2018 **BIGINSIGHT Project:** Collaboration between Norwegian Computing Center and DNB. RCN, Secured

2018 **FINPRO Project:** Collaboration between Norwegian Computing Center and Exabel. RCN, Secured

2014 **CELS project:** Full funding for a 4 years PhD position. RCN, Secured

2012 **Eurasia scholarship:** Full funding for 2 year of master studies in Norway, Secured

### Selected Invited Talks

2025 **Flexible Bayesian Model Selection and Model Averaging.** University of Oslo. OCBE biostatistics seminar series, Norway.

2024 **A subsampling MCMC approach for Bayesian model selection and model averaging.** Universitat Pompeu Fabra. Statistics Seminar Series, Spain.

2022 **Boosting Performance of Latent Binary Neural Networks With a Local Reparametrization Trick and Normalizing Flows.** WU Vienna, Institute for Statistics and Mathematics. Research Seminar Winter Term 2022/23, Austria.

2022 **Variational Inference for Bayesian Neural Networks under Model and Parameter Uncertainty.** Wiener Biometrische Sektion, Austria.

2020 **A Novel Algorithmic Approach to Bayesian Logic Regression.** Bayesian Analysis Discussion Paper Webinar, Online.

2019 **Combining Model and Parameter Uncertainty in Bayesian Neural Networks.** Probabilistic AI School, Norway.

2019 **Combining Model and Parameter Uncertainty in Bayesian Neural Networks.** CRONOSMDA Meeting, Cyprus.

2018 **Deep Bayesian Regression Models.** FocuStat Conference, Norway.

2018 **Deep Bayesian Regression Models.** Seminar on Bayesian Methods in Machine Learning, Yandex.

2016 **Variable Selection in Logistic Regression With a Latent Gaussian Field Models With an Application in Epigenomics.** Wiener Biometrische Sektion, Austria.

## Dissemination

2024 **Interview for Østfold AI Hub:** "Aliaksandr and Bayesian Methods." Read the interview online.

2024 **Interviewing Professor Sylvia Frühwirth-Schnatter:** Published on Integreat.no. Read the article online.

2017 **Article in TG:** Featured in TG - a Norwegian popular science magazine. Read the article online.

2017 **Blog Post:** "An Autumn with Bayesian Approaches in Vienna," published on the NORBIS blog. Read the blog post online.