

Simon Daniel Eiriksson

Introduction

Data scientist and public health analyst with 10+ years of experience working with Danish national health data, now transitioning into machine learning research. Currently pursuing an M.Sc. in Mathematical Modelling and Computation (Machine Learning focus) at the Technical University of Denmark, conducting thesis research on stochastic differential equations for generative modelling.

Research Interests: Probabilistic machine learning, generative models, stochastic differential equations, Bayesian inference, and health data applications.

Education

2023 – 2025	<p>Master of Science in Mathematical Modelling and Computation (Machine Learning specialization), Technical University of Denmark GPA of 10.6/12 (Excellent) – Selected coursework includes</p> <ul style="list-style-type: none">• Advanced Machine Learning• Deep Learning• Dynamic Optimization• Bayesian Machine Learning• Model-Based Machine Learning• Advanced Deep Learning in Computer Vision• Machine Learning for Signal Processing• Machine Learning Operations• Intro to Reinforcement Learning and Control• Scientific Computing for ODEs and PDEs <p>Two independent research-based projects: <i>Riemannian Laplace Approximation via Subspaces and Bayesian Quadrature</i> and <i>Improving Uncertainty Quantification via Bayesian Neural Networks</i>.</p> <p>Master's thesis (in progress): <i>Stochastic Differential Equations for Generative Modelling</i> – developing methods for parameter estimation in SDEs.</p>
2019	<p>Visiting Graduate Student (Mathematics) at University of St. Andrews, Scotland Mathematical Statistics – Markov Chains and Processes – Bayesian Inference</p>
2009 – 2013	<p>M.Sc. in Anthropology – University of Copenhagen, Denmark Independent research and field-work based thesis on community policing in Nairobi, Kenya</p>
2007	<p>Exchange student at University of Havana, Cuba - Courses in economics and philosophy. Fluency in Spanish</p>
2005 – 2008	<p>B.Sc. in Anthropology, Department of Anthropology, University of Copenhagen</p>
2001 – 2005	<p>B.Sc. in Mathematics, Department of Mathematical Sciences, University of Copenhagen</p>
2018 – 2024	<p>Independent courses:</p> <ul style="list-style-type: none">• Nordic Probabilistic AI School (Nordic ProbAI) 2024, Copenhagen• European Summer School of Logic Language and Computation, NUI, Galway• Time Series Analysis – Computer Architecture and Engineering – Introduction to Machine Learning and data modelling, all at Technical University of Denmark

Teaching experience

2024	Teaching Assistant, Technical University of Denmark – Deep Learning
2016	Assistant Lecturer, IT-University of Copenhagen – Digital Management, Governance and Accountability
2011 – 2015	Teaching Assistant at the Department of Anthropology, University of Copenhagen Anthropological Methods – Philosophy of Science in Anthropology – Quantitative Methods
2004 – 2012	Instructor at the Department of Mathematical Sciences, Faculty of Sciences, University of Copenhagen Introduction to Mathematics (mathematical analysis) – Linear Algebra I – Mathematical Models in Biology – Introduction to Microeconomics – Mathematics and Data Processing for Bioscience

Professional experience

2016 – 2023	Independent Data Scientist & Consultant in Public Health Data <ul style="list-style-type: none"> • Statistical analysis, ML-modelling, data analysis, report writing • BI, ETL, data wrangling, data quality research • Development of key performance indicators on national and regional health data • Co-authored two volumes of regional health surveys for Region Zealand • Toolbox: T-SQL, SAS, Python, VBA
2013 – 2015	Administrative officer at the Department for Health Data, National Institute for Health Data and Disease Control <ul style="list-style-type: none"> • Coordinator of international relations and Chairman of the Nordic Medico-Statistical Committee (NOMESCO) • Providing health statistics to international health organizations (OECD, NOMESCO, and EUROSTAT), public media, and the Danish parliament • Development of the new National Patients Registry • SQL/SAS programming • Data extraction from national health registries for research projects • Supervision of researchers

Publications and presentations

2022	Regional Health Survey 2021 Poulsen, H. S., Eiriksson, S. D., Christiansen, A. S. J., & Wingstrand, A. (2022). <i>Sundhedsprofil 2021 for Region Sjælland og kommuner – “Hvordan har du det?”</i> Region Sjælland, Data og udviklingsstøtte. https://bit.ly/3Ye2uxr
2018	Regional Health Survey 2017 Blaakilde, A. L., Eiriksson, S. D., Hansen, B. H., Olesen, L. S., & Wingstrand, A. (2018). <i>Sundhedsprofil 2017 for Region Sjælland og kommuner – “Hvordan har du det?”</i> Region Sjælland, Produktion, Forskning og Innovation. https://bit.ly/478kbCy
2015	Presentation at the American Anthropological Association Annual Meeting <i>Privatizing policing – contesting government</i> in the panel <i>Beyond Neoliberal Communities</i>