Rasmus Frigaard Lemvig - Curriculum Vitae

Birthday: 1 January, 1999
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Homepage: https://rasmusfl.github.io/

Education

University of Copenhagen
PhD student. Principal supervisor: Martin Rainer Bladt. Co-supervisor: Mogens Steffensen *(May 2025 - present)*
Working thesis title: *Multi-state models: modern methods, machine learning and meditations* $((mm)^3)$

University of Copenhagen
Master of Science in Actuarial Mathematics *(Sep 2023 - Jan 2025)*
Thesis: Machine learning methods for survival and multi-state models - Supervised by Martin Rainer Bladt

University of Copenhagen
Bachelor of Science in Actuarial Mathematics *(Sep 2021 - Jun 2023)*

University of Copenhagen
Bachelor of Science in Mathematics *(Sep 2018 - Jun 2021)*
Thesis: Cubic and Quartic Reciprocity - Supervised by Ian Kiming

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Working experience

University of Copenhagen - Department of Mathematical Sciences
Scientific assistant *(Feb 2025 - present)*. TA in the courses Quantitative Risk Management and Topics in Life Insurance. Working on a research project with Martin Bladt.

Teaching assistant *(Sep 2020 - Jan 2025)*. Noteworthy courses include:

- Topics in Probability
- Basic Life Insurance Mathematics
- Statistical Methods
- Brownian Motion
- Continuous Time Finance
- Advanced Probability Theory 2
- Stochastic Processes in Non-Life Insurance
- Insurance and Law
- Probability Theory 2
- Analysis 0
- Probability Theory
- Lebesgue Integral and Measure Theory

My complete teaching history can be found here: https://rasmusfl.github.io/work.html.

GoTutor
Freelance Tutor *(2019-2020)*
Tutoring in high school mathematics.

Self-employed
Tutor *(Sep 2021 - present)*
Tutoring in various courses at the University of Copenhagen.

Academic proficiencies

Insurance: Knowledge of advanced topics in life insurance, in particular multi-state modelling and policyholder behaviour. Experience with basic non-life insurance theory and statistics.
Statistics: GLMs, mixed models, basics of Bayesian statistics, ridge regression and LASSO, machine learning, causal models, semiparametric statistics.
Probability theory: Stochastic processes, Markov processes, basics of stochastic calculus, concentration inequalities.

Programming proficiencies

Experience with programming in **R, Julia, Python/Cython and C++**.

Lecture notes

I have written lecture notes for the following courses (available on my homepage):

- *Quantitative Risk Management (QRM) 2023/2024*
- *Stochastic Processes in Non-Life Insurance (SkadeStok) 2023/2024*

Volunteer work

Danish Youth Association of Science (UNF)
Volunteer *(Jan 2016 - present)*. Some highlights include:

- **Cofounder of, coordinator and teacher at** UNF Science Weekend (2019 - 2023), a biannual weekend camp for elementary school students with 85 participants and 30 volunteers.
- **Teacher at** Mathematics Camp from 2021 to 2025 and at Machine Learning Camp 2024.
- **Teacher at** Week in mathematical modelling 2025, a camp with focus on differential equations and their applications.
- **Teacher** in several workshops. Topics: Linear algebra, calculus, number theory, graph theory, sums and sequences, differential equations.
- **Coordinator of and teacher in** the project Evenings of Natural Science Education where we taught young Ukrainian refugees.

A detailed description of my work for UNF can be found here: https://rasmusfl.github.io/volunteer.html.

University of Copenhagen - Department of Mathematical Sciences
Student representative in the Board of Education *(June 2022 - present)*

Miscellaneous

Languages: Danish (mother tongue), English (fluent).
Interests: Reading, in particular science fiction, horror and fantasy. Learning German, running, swimming, teaching mathematics. Music, in particular metal (especially power metal), rock and synthwave.