Rasmus Frigaard Lemvig - Curriculum Vitae

Birthday: 1 January, 1999 Address: Dalgas Boulevard 1, apartment 408, Frederiksberg 2000 in Copenhagen, Denmark Phone: +45 29 88 47 60 Homepage: https://rasmusfl.github.io/

Education

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

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 2024 and at Machine Learning Camp 2024.
- **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.