

# CURRICULUM VITAE

Leo G. Levenius

*His Majesty's Obedient and Humble PhD Aspirant*

## SUMMARY

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PhD Student in Mathematical Statistics at the Department of Mathematics at Stockholm University under the supervision of Associate Professor Mathias Millberg Lindholm. Researching how to incorporate machine learning for modelling life and health sequences.

## EDUCATION

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**Master of Science in Actuarial Mathematics** *June 2025*  
Stockholm University

**Bachelor of Science in Mathematics** *Dec. 2024*  
Stockholm University

**Bachelor of Science in Mathematical Statistics** *June 2023*  
Stockholm University

## ACADEMIC EXPERIENCE

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**PhD Student in Mathematical Statistics** *Oct. 2025 – Oct. 2030<sup>†</sup>*  
Stockholm University

**Amanuensis in Mathematical Statistics** *Aug. 2023 – July 2025*  
Stockholm University

## THESES

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- **M.Sc.** *Den Cramérska assuransmatematiken*, 2025.
- **B.Sc.** *Mersenne Primes and the Quest to Find Them*, 2024.
- **B.Sc.** *Användning av logistisk regression för att prediktera utfallet i snooker*, 2023.

## PRESENTATIONS

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- *The Cramér-Lundberg Ruin Theory*. PhD Seminar, Stockholm University, 2025.

## CONFERENCE ATTENDANCES

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- **Scandinavian Actuarial Conference 2026**, Stockholm.<sup>†</sup>
- **Insurance Data Science Conference 2026**, Hanover.<sup>†</sup>

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<sup>†</sup>Expected

- **Insurance Data Science Conference 2024**, Stockholm.

## TEACHING EXPERIENCE

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<b>Non-Life Insurance Pricing</b> Grading, supervising projects	<i>Autumn 2026</i> <sup>†</sup>
<b>Inference and Prediction for Life and Health Processes</b> Grading, supervising projects	<i>Autumn 2026</i> <sup>†</sup>
<b>Risk Models and Valuation in Life and Disability Insurance</b> Grading, supervising projects	<i>Autumn 2025</i>
<b>Challenging Mathematics</b> Grading hand-ins, conducting oral exams, mentoring	<i>Summer 2024, 2025</i>
<b>Introductory Course in Mathematics</b> Grading hand-ins, exams; mentoring, administration	<i>Summer 2024, 2025</i>
<b>Probability Theory II</b> Grading hand-ins, holding exercise sessions	<i>Spring 2024, 2025</i>
<b>Probability Theory I</b> Grading, writing, supervising hand-ins; grading, writing exams; holding exercise sessions	<i>Autumn 2023, 2024</i>
<b>Statistical Data Processing</b> Grading hand-ins	<i>Autumn 2023, 2024</i>
<b>Introduction to Data Processing</b> Grading hand-ins, projects	<i>Summer 2023</i>

## SUPERVISED UNDERGRADUATE STUDENTS

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*In co-supervision with Professor Ola Hössjer.*

- **Mr Mostafa Amini**, *Skattning av extrema ettårsutfall för aggregerad katastrofskadekostnad i en försäkringsportfölj*, 2026.<sup>†</sup>
- **Mr Yones Mestar**, *Jämförelse av metoder att uppskata hazardfunktioner*, 2026.<sup>†</sup>
- **Mr Alvar Mikkola**, *Beroende mellan antal skador och skadekostnad i Cramér–Lundberg-modellen*, 2026.<sup>†</sup>
- **Mr Anton Pinet Magnusson**, *A Comparison of Different Reinsurance Contracts: Stop-Loss, Excess-of-Loss and Proportional Reinsurance*, 2026.<sup>†</sup>
- **Mr Ashkan Safaee**, *Ett Information Bottleneck-perspektiv på Grokking: Avvägningar mellan Rate–Distortion och fasövergångar i neurala nätverks representationer*, 2026.<sup>†</sup>
- **Ms Turkinaz Örkash**, *Tidsserieanalys av löneutveckling baserad på utbildningsnivå*, 2026.<sup>†</sup>

## (SELECTION OF) COMPLETED COURSES

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*All courses are 7.5 credits and given by Stockholm University unless otherwise stated.*

### **Mathematical Statistics**

- Basic Insurance Mathematics
- Bayesian Methods
- Categorical Data Analysis<sup>1</sup>
- Inference and Prediction for Life and Health Processes
- Introduction to Finance Mathematics
- Linear Statistical Models<sup>2</sup>
- Mathematical Methods in Life Assurance II<sup>3</sup>
- Non-Life Insurance Pricing
- Probability Theory I
- Probability Theory II
- Probability Theory III
- Risk Models and Claims Reserving in Non-Life Insurance
- Statistical Analysis
- Statistical Data Processing
- Statistical Learning
- Statistical Theory and Applications of Deep Diffusion Models<sup>†</sup> (PhD course)
- Stochastic Processes and Simulation I
- Stochastic Processes and Simulation II
- Theoretical Statistics<sup>†</sup> (PhD course)
- Theory of Statistical Inference

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<sup>1</sup>Now *Classification and Analysis of Categorical Data*.

<sup>2</sup>Now *Introduction to Supervised Statistical Learning*.

<sup>3</sup>Now *Risk Models and Valuation in Life and Disability Insurance*.

## Mathematics

- Mathematical Communication
- Mathematics I (30 credits)
- Mathematics II - Algebra and Combinatorics
- Mathematics II - Analysis, part A
- Mathematics II - Analysis, part B
- Mathematics II - Linear Algebra
- Mathematics III - Combinatorics
- Mathematics III - Foundations of Analysis
- Mathematics III - Ordinary Differential Equations
- Mathematics, Science, and Society
- Numerical Analysis I
- Programming Techniques for Mathematicians<sup>4</sup>

## Economics and Law

- American Politics<sup>5</sup> (Uppsala University)
- Economic Strategic Thinking
- Economics for Actuaries
- Game Theory and Mathematical Economics
- Insurance Accounting
- Insurance Law for Actuaries I
- Insurance Law for Actuaries II
- Introduction to American History (Uppsala University)
- Macroeconomic Theory and Applications (15 credits)
- Microeconomic Theory and Applications (15 credits)

## ELECTED POSITIONS

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- Member of the Recruitment Committee for Doctoral Students in Mathematical Statistics at Stockholm University, since *Oct. 2025*.
- Deputy member of the Department of Mathematics Board, since *Oct. 2025*.

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<sup>4</sup>Now *Programming Techniques*.

<sup>5</sup>Now *Introduction to American Politics*.

## MEMBERSHIPS

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- Swedish Society of Actuaries, since *Feb. 2026*.

## PERSONAL INFORMATION

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- **Date of birth:** 2001-10-10
- **Citizenship:** Swedish
- **Address:** Stockholm University, SE-106 91 Stockholm, Sweden
- **E-mail:** [leo.levenius@math.su.se](mailto:leo.levenius@math.su.se)
- **Website:** [www.su.se/english/profiles/1/levenius](http://www.su.se/english/profiles/1/levenius)
- **LinkedIn:** [www.linkedin.com/in/leo-levenius](http://www.linkedin.com/in/leo-levenius)
- **Google Scholar:** Leo G. Levenius