

CURRICULUM VITAE

GEIR DRAGE BERENTSEN

Date of Birth December 27, 1984
Nationality Norwegian
Current positions Postdoc, *Department of Business and Management Science, Norwegian School of Economics*, Norway

Research Interests

- Time series & longitudinal data
- Measures of dependence
- Spatial models
- Computational statistics
- Applied statistics in medical research, social science and finance

Education

2013 **PhD in Statistics** at the *Department of Mathematics, University of Bergen*, Norway
Topic of thesis: Local Gaussian correlation
Reviewers: Prof. Dr. M. L. Rizzo (Bowling Green)
 Prof. Dr. C. Czado (Munich)
Supervisor: Prof. Dr. D. Tjøstheim (Bergen)

2009 **Master in Statistics** at the *Department of Mathematics, University of Bergen*, Norway
Topic of the thesis: Analysis of left-truncated data
Supervisor: Prof. Dr. J. Paulsen (Bergen)
Grade: A
Occupation Title: Actuary

Professional Experience

2019 - **Postdoc** - *Department of Business and Management Science, NHH*, Norway

2016 - 2019 **Postdoc** - *Department of Mathematics, University of Bergen*, Norway

2013 - 2016 **Consultant** - in industrial risk, *Safetec Nordic AS*, Bergen, Norway

2009 - 2013 **PhD Candidate** - *Department of Mathematics, University of Bergen*, Norway

2005 - 2009 **Teaching assistant**, part-time, *Department of Mathematics, University of Bergen*, Norway, Supervisor for seminars

2004 - 2009 **Fire officer**, *Egersund Firedepartment*, Egersund, Norway, part-time.

2003 - 2004 **Military service**, *Stormingenior*, Norwegian Army

Grants, Scholarships, and Awards

2019 Finansmarkedsfondet, Statistical modelling and inference for (high-dimensional) financial data (318 000 NOK)

- 2017 Statistician for a project in Developmental Cognitive Neuroscience funded by the *French National Research Agency* (Project ID: ANR-13-APPR-0010), France (~2500 EUR)
- 2009 Travelling funding of PhD, *Norwegian Research Council*, grant no. 204321

Peer-reviewed Publications

1. **Berentsen G.D.**, Cao R., Francisco-Fernandez M., Tjøstheim, D. (2017) ‘Some properties of local Gaussian correlation and other nonlinear dependence measures’, *Journal of Time Series Analysis*; Volum 38. (2), 352-380 (*NSD 2, ABS 3*)
2. **Berentsen G.D.**, Tjøstheim D. (2014). ‘Recognizing and visualizing departures from independence in bivariate data using local Gaussian correlation’. *Statistics and Computing* 24: 785–801. (*NSD 2*)
3. **Berentsen G.D.**, Kleppe T, Tjøstheim D. (2014). ‘Introducing localgauss, an R-package for estimating and visualizing local Gaussian correlation’. *Journal of Statistical Software* 56(12). (*Nivå 1*)
4. **Berentsen G.D.**, Støve B, Tjøstheim D, Nordbø T. (2014). ‘Recognizing and visualizing copulas: an approach using local Gaussian correlation’. *Insurance: Mathematics and Economics* 57: 90–103 (*Nivå 1*)

Other Publications

1. Fossan I., Sæbø A. O., Falck A., Garstad J. J., Hestad J.A., **Berentsen G.D.**, Wiklund J., Nilsen, M., ‘Process leak for offshore installations frequency assessment model – PLOFAM’ (2016) , Leak frequency model developed for Norwegian offshore-installations, www.Norskoljeoggass.no
2. Risikonivå i norsk petroleumsvirksomhet, land 2013 (2014), co-author, <http://www.ptil.no/>
3. Risikonivå i norsk petroleumsvirksomhet, land 2014 (2015), co-author, <http://www.ptil.no/>
4. Risikonivå i norsk petroleumsvirksomhet, offshore 2014 (2015), co-author, <http://www.ptil.no/>
5. **Berentsen G.D.** (2013) ‘Recognizing and visualizing dependence using local Gaussian correlation’, Ph.D. thesis, University of Bergen
6. **Berentsen G.D.** (2009) ‘Analysis of left-truncated data with an application to insurance data’, Master thesis, University of Bergen

Working papers

1. **Berentsen G.D.** Maroutti A., Bulla J., Støve B. (2019) ‘Modelling clusters of corporate defaults: A Markov-switching Poisson autoregressive model’
2. **Berentsen G.D.** (2019), ‘Laplace approximation in Mixed hidden Markov models for longitudinal data’
3. **Berentsen G.D.** Azzolini F., Gjessing H, Lie R.T., Skaug H.J., (2019) ‘Heritability curves: A local Measure of Heritability’
4. Bacri T, **Berentsen G.D.**, (2019) Fast parameter and confidence interval estimation for Hidden Markov Models using Template Model Builder
5. Mannseth J., **Berentsen G.D.**, Skaug H. J. (2019), ‘Robustness of the SPDE approximation under short range spatial correlation’
6. Mannseth J., Skaug H. J., Lie R.T., Moster D., **Berentsen G.D.** (2019), ‘Variation in use of

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Teaching experience

Lecturer:

- 2019 Lecturer (shared responsibility) MET4, NHH
2019 Two Lectures and arrangement of workshop MAT12, NHH
2017 Lecturer in Elementary statistics (1st and 2nd year students)
2017 Substitute lecturer in Applied statistics (2nd year students)
2016 Lecturer in Elementary statistics (1st and 2nd year students)
Department of Mathematics, University of Bergen

Teaching assistant:

- 2005 - 2013 Various topics in statistics, e.g. Elementary statistics (1st and 2nd year, Tutorial & Lab), Applied statistics (2nd year, Tutorial), Stochastic processes (3th – 5th year, Tutorial), Survival analysis (3th – 5th year, Tutorial), Life insurance (3th – 5th year, Tutorial), Financial risk (3th – 5th year, Tutorial & Lab), Finance theory (3th – 5th year, Tutorial), Generalized Linear Models (3th – 5th year, Tutorial & Lab), Nonlife-insurance (3th – 5th year, Tutorial).
Department of Mathematics, University of Bergen

Supervision

In addition to providing statistical support for several master students, formal collaborations have taken place with the students listed below.

Janne Mannseth, Co-supervisor, Ph.D (2016 -), *Department of Mathematics, University of Bergen*

Francesca Azzolini Ph.D (2018 -), *Department of Mathematics, University of Bergen*

Timothi Bacri Ph.D (2019 -), *Department of Mathematics, University of Bergen*

Ellisif Nygaard, Main supervisor, Master (2017 - 2019), *Department of Mathematics, University of Bergen*

David Høysæter and Erlend Larsplass, Main supervisor (2019), *Department of Business and Management Science, Norwegian School of Economics,*

Sensor for master thesis, Alexander Risheim (2018)

Reviewing and Editorial Activities

2017 - Reviewer in *Frontiers in Behavioural Neuroscience*

2017 - Co-editor of *Tilfeldig Gang* (The newsletter of The Norwegian Statistical Association)

Conference talks

- 06/2017 'Pros and cons of Laplace approximations in mixed hidden Markov models', EcoSta 2017, Hong Kong University of Science and Technology, Hong Kong
03/2012 'Recognizing and visualizing copulas using local Gaussian correlation', invited talk, Department of economics, Monash University, Melbourne
05/2012 'Local Gaussian correlation in practice', 13th International Conference on Econometrics, Operations Research and Statistics, Famagusta Northern Cyprus

Invited Researcher

- 2012 Department of economics, Monash University, Melbourne (3 months)

Service

- 2017 - Member of work package 2 (Biostatistics support service) of the HRR Health registries for research (HRR) project, A national research infrastructure project funded by the Research Council of Norway.
- 2016 - Member of the *Statistical Consulting Unit* at the *Department of Mathematics* at the *University of Bergen*
- 2016 - Responsible for *Bergen biostatistical seminars* at the department of mathematics, University of Bergen
- 2016 - Board member, *The Norwegian Statistical Association (NSF) - Bergen*
- 2016 - Cashier, *Tørvikbygd og Ljones Grunneigarlag*
- 2010 Technical support, 23rd Nordic Conference on Mathematical Statistics Voss, Norway

Computing

- o Major operating systems: Windows, Unix/Linux
- o MS-Office, LaTeX
- o Programming languages: excellent knowledge of R and C++, good knowledge of Python and VBA

Language Skills

Norwegian	native speaker
English	fluent (written and spoken)
French	basic knowledge

References will be provided upon request by

- o Assoc. Prof. Bård Støve (group leader statistics and collaborator) Department of Mathematics ,University of Bergen, Bard.Stove@uib.no, +47 41 64 59 14
- o Prof. Jan Bulla (collaborator), Department of Mathematics, University of Bergen, Jan.Bulla@uib.no, +47 55 58 28 75
- o Prof. Dag Bjarne Tjøestheim, emeriti at Department of Mathematics, University of Bergen, Dag.Tjostheim@math.uib.no
- o Kristine Lysnes (for question about teaching), Senior Consultant, Department of Mathematics, University of Bergen, , +47 55 58 28 34