

# Curriculum Vitae: Samuel Wiquist

## Personal Information

Born: July 31, 1991

Gender: Male

Nationality: Swedish

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## Current Position

*Ph.D. student* at the Div. of Mathematical Statistics, Centre for Mathematical Sciences, Lund University. I started the Ph.D. program on September 1st, 2016, and expected to graduate in June 2021. My main advisor is Umberto Picchini.

Umberto Picchini's adress: mailing address:  
Mathematical Sciences - Chalmers University of Technology and University of Gothenburg  
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## Research Interests

Bayesian inference, intractable likelihood problems, and Monte Carlo methods.

## Appointments Held

2015-2015 Intern, Ellevio AB.

## Education

2016 MSc in Engineering Mathematics, Faculty of Engineering, Lund University.  
Master's thesis: *An Adaptive Iterated Filtering Algorithm*, defended on the 10th of June 2016. The thesis treated maximum likelihood-based parameter estimations of partially observed Markov process models, and a new version of the Iterated Filtering Algorithm was introduced.

2010 Upper-secondary school, Natural Science Program, Katedralskolan, Lund, (Sv. gymnasieexamen).

## Publications

### CONFERENCE PAPERS

- [1] **Samuel Wqvist**, Pierre-Alexandre Mattei, Umberto Picchini, and Jes Frellsen. Partially Ex- change- able Networks and Architectures for Learning Summary Statistics in Approximate Bayesian Com- putation. In ICML, pages 6798–6807, 2019

### PRE-PRINTS

- [1] **Samuel Wqvist**, Andrew Golightly, Ashleigh T Mclean, and Umberto Picchini. Efficient infer- ence for stochastic differential mixed-effects models using correlated particle pseudo-marginal al- gorithms. *arXiv preprint arXiv:1907.09851*, 2019
- [2] **Samuel Wqvist**, Umberto Picchini, Julie Lyng Forman, Kresten Lindorff-Larsen, and Wouter Boomsma. Accelerating delayed-acceptance markov chain monte carlo algorithms. *arXiv preprint arXiv:1806.05982*, 2018.

## Talks

- 2019 MC 20: Workshop on Numerical Methods for Stochastic Differential Equations *Efficient inference for stochastic differential equation mixed-effects models using correlated particle pseudo-marginal al- gorithms*
- 2019 Pioneers of Probabilistic Programming (Meet-up group, Copenhagen) *An Introduction to Bayesian Statistics and Approximate Bayesian Computing*
- 2019 Bayes@Lund. *Automatic learning of summary statistics for Approximate Bayesian Computation us- ing Partially Exchangeable Networks.*
- 2019 Statistics and Biomathematics Seminar, Dept. Mathematical Sciences, Chalmers University of Technology and University of Gothenburg. *Automatic Learning of Summary Statistics for Approxi- mate Bayesian Computation Using Deep Learning.*

## Teaching

- Spring 2020 Computer laboratory assistant, *MASM11/FMSN50 Monte Carlo and Empirical Methods for Stochastic Inference*, Lund University.
- Fall 2019 Computer laboratory assistant, *FMSN60/MASM18 Financial Statistics*, Lund University.
- Fall 2019 Teaching assistant and computer laboratory assistant, *FMSF15/MASCo3 Markov processes*, Lund University.
- Spring 2019 Computer laboratory assistant, *MASM11/FMSN50 Monte Carlo and Empirical Methods for Stochastic Inference*, Lund University.
- Fall 2018 Computer laboratory assistant, *FMSN60/MASM18 Financial Statistics*, Lund University.

Fall 2018	Teaching assistant and computer laboratory assistant, <i>FMSF15/MASCo3 Markov processes</i> , Lund University.
Spring 2018	Computer laboratory assistant, <i>MASM11/FMSN50 Monte Carlo and Empirical Methods for Stochastic Inference</i> , Lund University.
Fall 2017	Computer laboratory assistant, <i>FMSN60/MASM18 Financial Statistics</i> , Lund University.
Fall 2017	Teaching assistant and computer laboratory assistant, <i>FMSF15/MASCo3 Markov processes</i> , Lund University.
Spring 2017	Teaching assistant and computer laboratory assistant, <i>FMSO35 Mathematical Statistics, Basic Course</i> , Faculty of Engineering, Lund University.
Fall 2016	Teaching assistant and computer laboratory assistant, <i>FMSO32 Mathematical Statistics, Basic Courses</i> , Faculty of Engineering, Lund University.
Spring 2016	Computer laboratory assistant, <i>FMSO35 Mathematical Statistics, Basic Course</i> , Lund University.
Fall 2015	Teaching assistant and computer laboratory assistant, <i>FMSO86 Mathematical Statistics, Faculty of Engineering</i> , Lund University.

## Positions of Trust

2013-2014	Head of Student Council of the Engineering Mathematics program.
2013-2014	Student representative in the the Program Management Group of the Engineering Mathematics program.
2012-2013	Head of fair and logistics FARAD 2013, (FARAD is a career fair organized by students).