Agnieszka Borowska

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CONTACT INFORMATION	University of Glasgow School of Mathematics and Statistics University Place Glasgow G12 8QQ	E-mail: Agnieszka.Borowska@glasgow.ac.uk Website: aborowska.github.io

RESEARCH INTERESTS

Bayesian Methods, State Space Models, Sequential Monte Carlo, Simulation Techniques, Rare Events Estimation

CURRENT POSITION

University of Glasgow, UK, — from May 2018
Postdoctoral researcher in Statistics (with Prof. Dirk Husmeier),
Position within the SofTMech Centre (an EPSRC centre for Multiscale Soft Tissue Mechanics)

EDUCATION

VU Amsterdam, The Netherlands, — Jul. 2019
Ph.D. in Econometrics,
Supervisors: Prof. Siem Jan Koopman and Dr Lennart. Hoogerheide

University of Edinburgh, UK, — Apr. 2017 – Jun. 2017
Postgraduate Research Visit at the School of Mathematics,
Host Supervisor: Prof. Ruth King

Tinbergen Institute and **VU Amsterdam**, The Netherlands — Aug. 2015
M.Phil., *major:* Econometrics, *minor:* Macroeconomics

University of Warsaw, Poland — Sep. 2013
Faculty of Mathematics, Informatics and Mechanics
B.Sc. in Mathematics, *minor:* Probability Theory

University of Göttingen, Germany — Sep. 2010 – Feb. 2011
Faculty of Economics and Business Administration
M.Sc. programme, exchange within the Erasmus Programme

Warsaw School of Economics, Poland — Jan. 2012
M.Sc. in Economics, *major:* Macroeconomic Analysis

Warsaw School of Economics, Poland — Jul. 2009
B.Sc. in Economics, *major:* Macroeconomic Analysis,
minor: Computational and Optimisation Methods in Decision Making

PUBLICATIONS

Partially Censored Posterior for Robust and Efficient Risk Evaluation,
with Lennart Hoogerheide, Siem Jan Koopman and Herman K. van Dijk,
Journal of Econometrics, 2019 (forthcoming)

Time-varying Combinations of Bayesian Dynamic Models and Equity Momentum Strategies,
with Nalan Baştürk, Stefano Grassi, Lennart Hoogerheide and Herman K. van Dijk,
Journal of Econometrics, 2018

Bayesian Dynamic Modeling of High-Frequency Integer Price Changes,
with István Barra and Siem Jan Koopman,
Journal of Financial Econometrics, 2018

SUBMITTED AND UNDER REVISION

Bayesian Risk Forecasting for Long Horizons,
with Lennart Hoogerheide and Siem Jan Koopman,

ONGOING RESEARCH

Gaussian Processes and ABC for Statistical Inference in Cell Migration SDE Systems,
with Diana Giurghita and Dirk Husmeier

Bayesian Optimisation for Left Ventricle Biomechanical Models,
with Dirk Husmeier, Hao Gao and Xiaoyu Luo

Semi-Complete Data Augmentation,
with Ruth King

Bayesian Risk Evaluation for State-Space Models,
with Lennart Hoogerheide and Siem Jan Koopman

CONFERENCE AND SEMINAR PRESENTATIONS ([P]–POSTER)	**10th European Seminar on Bayesian Econometrics [P]** (scheduled), St Andrews, UK	2–3 Sep. 2018
	39th International Symposium on Forecasting, Thessaloniki, Greece	16–19 Jun. 2018
	Workshop on Uncertainty Quantification for Cardiac Models [P], Cambridge, UK	5–7 Jun. 2019
	Cside 2018 Conference, Glasgow, UK	26 Nov. 2018
	2nd Joint Liverpool-Glasgow Maths Healthcare Centre Meeting, Liverpool, UK	30 Aug. 2018
	4th Bayesian Young Statisticians Meeting, Warwick, UK	02 – 03 Jul. 2018
	12th Netherlands Econometric Study Group Meeting [P], Amsterdam, The Netherlands	25 May 2018
	1st Bayes Comp [P], Barcelona, Spain	26– 28 Mar. 2018
	10th International Conference of the ERCIM WG on Computational and Methodological Statistics [P], London, UK	16– 18 Dec. 2017
	8th European Seminar on Bayesian Econometrics, Maastricht, The Netherlands	26–27 Oct. 2017
	Sequential Monte Carlo Workshop 2017 [P], Uppsala, Sweden	30 Aug. – 1 Sep. 2017
	1st International Conference on Econometrics and Statistics, Hong Kong	15–17 Jun. 2017
	Statistics Seminar Series of the School of Mathematics, Edinburgh, UK	19 May 2017
	10th International Conference on Computational and Financial Econometrics, Seville, Spain	9–11 Dec. 2016
	3rd Bayesian Young Statisticians Meeting, Florence, Italy	20–21 Jun. 2016
	11th Netherlands Econometric Study Group Meeting [P], Leuven, Belgium	17–18 Jun. 2016
	TI Ph.D. Lunch Seminar, Amsterdam, The Netherlands	24 May 2016
	Econometrics Brown Bag Seminar, Amsterdam, The Netherlands	21 Jan. 2016

TEACHING EXPERIENCE	**University of Glasgow**, UK *Honours and MSc Projects supervision* (Statistics) Co-supervision with Dirk Husmeier	2018/2019
	VU Amsterdam, the Netherlands *Econometrics II* (B.Sc. course) Teaching Assistant of Lennart Hoogerheide	Feb. – Mar. 2017
	Business Mathematics (B.Sc. course, evaluation: 3.8/5)	Sep. – Oct. 2016
	Business Statistics (B.Sc. course, evaluation: 4.1/5)	Feb. – Mar. 2016
	Tinbergen Institute, Amsterdam, the Netherlands *Advanced Econometrics II* (M.Phil. course, evaluation: 4.1/5) Teaching Assistant of Kees Jan van Garderen	Jan. – Feb. 2015
	Measure Theory and Stochastic Processes (M.Phil. course, evaluation: 4.2/5) Teaching Assistant of Peter J. C. Spreij	Sep. – Oct. 2014

PROFESSIONAL AND RESEARCH EXPERIENCE	**University of Warsaw**, Poland *Researcher*	Feb. 2012 – Sep. 2014
	Pension system reform modelling within the OLG framework under time inconsistency; welfare analysis of various fiscal closures; numerical model solving in Fortran; paper writing and editing.	
	Civil Development Forum, Warsaw, Poland *Internship in the Analytical Department*	Jul. 2010
	Analysis of the privatisation process in Poland; comparison of fiscal policy rules in selected EU countries; development of a database on fiscal stability reforms in the EU.	
	National Bank of Poland, Warsaw, Poland *Internship in the Economics Institute, Monetary Policy Strategy Bureau*	Aug. 2009
	Comparison and evaluation of the communication tools and institutional solutions implemented in selected central banks worldwide.	

ADDITIONAL COURSES AND TRAININGS	**Forecasting Summer School**	
	Thessaloniki, Greece	Jun. 2019
	Probabilistic forecasting (scoring rules, combining predictive distributions)	

Scalable Bayesian Inference
Edinburgh, UK — Jun. 2018
Scalable algorithms for large datasets (embarrassingly parallel MCMC, approximate MCMC), scalable Bayesian methods for very high-dimensional data analysis

Workshop on Machine Learning Models and Methods for Econometricians
Maastricht, The Netherlands — Oct. 2017
Gaussian processes, distributed and subsampling MCMC, variational Bayes, deep ;earning

Intensive PhD level course on Sequential Monte Carlo Methods
Uppsala University, Sweden — Aug. 2017
Particle MCMC, high-dimensional filtering, SMC for probabilistic graphical models and probabilistic programming

Reading Group on Bayesian Nonparametrics
University of Edinburgh, UK — May – Jun. 2017
Introduction to Dirichlet process and their mixtures, Bayesian nonparamteric regression

Course on High Performance Computing
VU Amsterdam, The Netherlands — Oct. 2016
Basics of Unix and cluster computing, Hadoop and data analytics, GPU programming, HPC cloud

Summer School in Applied Macroeconomics
University of Salento, Lecce, Italy — Jul. 2012
Programming in Matlab, VAR for monetary policy, state space models and the Kalman Filter

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SCHOLARSHIPS AND AWARDS

IIF travel award grant to attend ISF 2019 and the forecasting summer school
International Institute of Forecasters — Mar. 2019

Cside 2018 winners' prize
(Model 3 and Additional Challenge) — Nov. 2018

ISBA travel award to attend BAYSM 2018
BAYSM 2018 organizing committee, — Apr. 2018

SMC2017 scholarship to attend the workshop and the intensive course
SMC2017 organizing committee — Aug. 2017

Tinbergen Institute merit-based scholarship
Tinbergen Institute, full scholarship, first and second year — Sep. 2013 – Aug. 2015

Student Exchange Scholarship
Warsaw School of Economics, the LLP Erasmus — Sep. 2010 – Feb. 2011

Scholarship for excellent academic achievements
Warsaw School of Economics — Oct. 2007 – Sep. 2010

COMPUTER SKILLS	Strong experience in MATLAB, Fortran, R
	Experience with Python, C, PHP, Visual Basic, SQL, BUGS/JAGS
	Familiarity with EViews, Stata, SPSS
	Other: LaTeX, Linux, GitHub, SVN
FOREIGN LANGUAGES	Polish (native), English (fluent), German (advanced), Russian (intermediate), French (basic), Dutch (basic)
REFEREES	**Prof. Siem Jan Koopman**
	The Department of Econometrics
	Vrije Universiteit Amsterdam, e-mail: s.j.koopman@vu.nl
	Dr Lennart Hoogerheide
	The Department of Econometrics
	Vrije Universiteit Amsterdam, e-mail: l.f.hoogerheide@vu.nl
	Prof. Ruth King
	The School of Mathematics,
	The University of Edinburgh, e-mail: ruth.king@ed.ac.uk
	Prof. Herman K. van Dijk
	Econometric Institute,
	Erasmus University Rotterdam, e-mail: hkvandijk@ese.eur.nl