Anthony Ebert

anthony.ebert@usi.ch • +41 782 520 888

▬▬▬ Experience

2019-Present **Postdoctoral researcher**; Università della Svizzera italiana

Statistical Inference on Large-Scale Mechanistic Network Models

2019-Present **Teaching assistant**; Università della Svizzera italiana

Statistics

2018 **Casual lecturer**, Mathematics and Statistics for Medical Science; Queensland University of Technology

2016-2017 **Sessional academic tutor**, Quantitative Methods in Science; Queensland University of Technology

2017 **Mentor**, Predictive Analytics: Gaining Insights from Big Data (Online course); Queensland University of Technology

2016 **Teaching assistant**, Big Data: Statistical Inference and Machine Learning (Online course); Queensland University of Technology

2012 **Engineer**; Atom Consulting

2010-2011 **Course tutor**, Products and Value Chains; University of Sydney

2007-2009 **Year in Industry Internship Holder**; ANSTO Minerals

▬▬▬ Education

2016-Present **PhD, Statistics** *(Under external review)*; Queensland University of Technology

Dynamic Queueing Networks: Simulation, Estimation and Prediction

2015 **Honours, Statistics**; University of Western Australia

Predicting Bearing Failure using Joint Models with Longitudinal and Time-to-event Data

- HDs in all subjects (First semester 2015)

2013-2014 **Bachelor of Science, Statistics**; Australian National University

2010-2013 **MPhil, Chemical Engineering**; University of Sydney

Synthesis, Preparation and Assembly of Carbon Nanotube-Based Electrode Materials

2005-2009 **Bachelor of Engineering, Chemical Engineering**: University of Sydney

Pre-prints and publications

Ebert, A., Wu, P., Mengersen, K., & Ruggeri, F. (2017). Computationally Efficient Simulation of Queues: The R Package queuecomputer. **arXiv:1703.02151**. (Accepted to the Journal of Statistical Software)

Ebert, A., Dutta, R., Mengersen, K., Mira, A., Ruggeri, F., & Wu, P. (2019). Likelihood-free parameter estimation for dynamic queueing networks: case study of passenger flow in an international airport terminal. **arXiv:1804.02526** (To revise and resubmit to the Journal of the Royal Statistical Society, Series C)

Liu, J., **Ebert, A.**, Variava, M. F., Dehghani, F., & Harris, A. T. (2010). Surface modification and Pt functionalisation of multi-walled carbon nanotubes in methanol expanded with supercritical CO_2. Chemical Engineering Journal, 165(3), 974-979.

Statistical skills

approximate Bayesian computation, statistical network models, Bayesian hierarchical modelling, statistical distance, kernel methods, functional data analysis, curve registration, agent-based models, discrete event simulation, longitudinal data, mixed effects models, spline methods

Technical skills

Programming: R (5 years exp), Python, C++, Matlab, SQLite + Relational algebra (Stanford Online)

Operating Systems: Linux, OSX, Windows, High performance computing (PBS Pro)

Document preparation: LaTeX, Rmarkdown, Microsoft Office

Probabilistic programming: JAGS, STAN, OpenBUGS

R packages authored: **queuecomputer** (on CRAN), **EasyMMD**, **protoABC**

Referees

Professor Kerrie Mengersen
ARC Centre of Excellence in Mathematical and Statistical Frontiers (ACEMS), Queensland University of Technology, Brisbane, Australia
k.mengersen@qut.edu.au

Professor Fabrizio Ruggeri
Italian National Research Council in Milano, Italy & ACEMS, Queensland University of Technology, Brisbane, Australia
fabrizio@mi.imati.cnr.it

Dr Paul Wu
ARC Centre of Excellence in Mathematical and Statistical Frontiers (ACEMS), Queensland University of Technology, Brisbane, Australia
p.wu@qut.edu.au

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