



**ABOUT**

wessel.p.bruinsma   
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Wessel Bruinsma 

wesselb.github.io   
Wessel Bruinsma   
wesselb 

**LANGUAGES**

dutch, native  
english

**INTERESTS**

*probabilistic modelling, Bayesian nonparametrics, approximate inference, signal processing*

**EDUCATION**

- 18/01 – now **PhD** University of Cambridge  
• Supervised by Dr Richard Turner
- 15/10 – 16/09 **MPhil (distinction, class rank 1)** University of Cambridge  
• Machine learning, speech, and language technology  
• Thesis: [The GGPCM](#), supervised by Dr Richard Turner
- 12/09 – 15/07 **Hons BSc (distinction, class rank 1)** Delft University of Technology  
• Electrical engineering with a specialisation in mathematics  
• Thesis: [Real-Time Wideband Spectrum Sensing](#)

**PROFESSIONAL HISTORY**

- 16/09 – now **Machine Learning Researcher** Invenia Labs Limited, Cambridge  
• Solving problems in the fields of machine learning, finance, electricity systems and markets, and complex systems
- 14/09 – 15/07 **Technical Specialist** EEMCS Recruitment Days, Delft  
• Design and implementation of solutions to scheduling problems
- 13/09 – 14/07 **Electrical Engineer** TU Delft Solar Boat Team, Delft  
• Design and analysis of a power distribution system  
• Competed in DONG Solar Energy Challenge 2014  
• Competed in Solar1 Monte Carlo Cup 2014

**AWARDS**

- 16/03 **UfD-Damen Bachelor Award (EUR 2000)**

**GRANTS**

- 2018 – 2021 **International Doctoral Scholarship (IDS) Grant**

**INVITED TALKS**

- 18/03 **Invenia Labs Internal Conference (InveniaCon 2)**  
• Agreeing to Disagree (Aumann's Agreement Theorem)  
• Multi-Output Time Series Modelling with Gaussian Processes
- 17/09 **Invenia Labs Internal Conference (InveniaCon)**  
• Reasoning About the World (Cox's Theorem)  
• Modelling Complex Phenomena in Electricity Markets

## PUBLICATIONS

### PREPRINTS

- [pdf](#) Bruinsma, W. P., Turner, R. E. (2018). "Learning Causally-Generated Time Series."
- [pdf](#) Requiema J. R., Tebbutt W. C., Bruinsma W. P., Turner, R. E. (2018). "The Gaussian Process Autoregressive Regression Model (GPARG)." *arXiv preprint arXiv:1808.07511*.

### PEER-REVIEWED PUBLICATIONS

- [pdf](#) Bosma, S., Bruinsma, W. P., Hes, R. P., Bentum, M. J., Lager, I. E. (2017). "Grating Lobe Prediction in 3D Array Antennas," in *Antennas and Propagation (EuCAP), 11th European Conference on*.
- [pdf](#) Bruinsma, W. P., Hes, R. P., Bosma, S., Lager, I. E., Bentum, M. J. (2016). "Radiation Properties of Moving Constellations of (Nano) Satellites: A Complexity Study," in *Antennas and Propagation (EuCAP), 10th European Conference on*.
- [pdf](#) Bentum, M. J., Lager, I. E., Bosma, S., Bruinsma, W. P., Hes, R. P. (2015). "Beamforming in Sparse, Random, 3D Array Antennas with Fluctuating Element Locations," in *Antennas and Propagation (EuCAP), 9th European Conference on*.

### POSTERS

- [pdf](#) Tebbutt, W. C., Bruinsma, W. P., and Turner R. E. (2018). "Gaussian Process Probabilistic Programming," presented at *Probabilistic Programming (ProbProg 2018), The International Conference on*.

## SLIDES

- [pdf](#) Bruinsma, W. P. "Agreeing to Disagree."
- [pdf](#) Bruinsma, W. P. "The Gaussian Process Convolution Model."
- [pdf](#) Bruinsma, W. P. "Reasoning About the World."

## WRITE-UPS

- [pdf](#) Bruinsma, W. P. "Spike and Slab Priors."
- [pdf](#) Bruinsma, W. P. "Agreeing to Disagree."