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# Emily Muller

## School

- 2019 2022 PhD, Imperial College London, School of Public Health, UK.
- 2016 2017 MSc Mathematical Science, African Institute for Mathematical Sciences (AIMS), South Africa, 'A Dynamic Approach for Longitudinal Network Analysis: the Stochastic Actor-Oriented Model'.
  - Cum Laude (awarded by Stellenbosch University).
- 2010 2014 **BSc Mathematics**, *University of Southampton*, UK. First Class Honours.
- 2006 2010 **A-Levels**, The Charter School, UK.

  Mathematics (A\*), Chemistry (A\*), Physics (A), Biology (A), Further Math AS-level (A).

# Employment

- 2019 Research Assistant in Machine Learning, Imperial College London, UK. Pathways to Healthy Equitable Cities.
- 2018 **Student Placement**, Modelling and Digital Sciences, CSIR, Pretoria, South Africa. Data driven approach to quantifying wind resource in South Africa.
- 2015 2016 **Junior Analyst**, *Munro Forensic Actuaries*, Cape Town, South Africa. Calculating compensation for RAF claims with assumptions of discounting, mortality etc.
- 2012 2013 Actuarial Placement Student, Ageas Insurance Limited, Southampton, UK. Reserve forecasting based on historic trends.

#### Research Activities

- 2020 **Publication.** Clark et al. "High-resolution spatiotemporal measurement of air and environmental noise pollution in Sub-Saharan African cities: Pathways to Equitable Health Cities Study protocol for Accra, Ghana", BMJ Open, **10:8** (2020).
- 2019 **Publication.** Comninos. A, Muller. E, Mutung'u. G. "Artificial intelligence for sustainable human development". Global Information Society Watch, **19** (2019) 47 52.
- 2019 Organised AI & Fairness Workshop. The Deep Learning Indaba, Nairobi, Kenya.
- 2019 Poster presentation. European Workshop on Cognitive Neuropsychology, Italy.
- 2019 Publication. Muller. E, Shock. J, Bender. A, Kleeberger. J, Hogen. T, Rosenfelder. M, Bah. B, Lopez-Rolon. A. "Outcome prediction with serial neuron-specific enolase and machine learning in anoxic-ischaemic disorders of consciousness". Computers in Biology and Medicine, 107 (2019) 145 152.
- 2018 Attended Computational Neuroscience Imbizo, Cape Town, South Africa.

- 2018 **Hosted Reinforcement Learning Tutorial.** Data Science Workshop, AIMS, Cape Town, South Africa.
- 2017 **Presented** Structured MSc thesis at Probabilistic and Statistical Methods for Networks Summer School at Berlin Math School, Germany.

## References

1. **Prof Majid Ezzati**, Chair in Global Environmental Health School of Public Health, Imperial College London.

London, UK.

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2. **Prof Jeff Sanders**, Academic Director, AIMS.

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3. Dr Vukosi Marivate, Senior Lecturer, University of Pretoria.

Pretoria, South Africa.

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