

BRADLEY GRAM-HANSEN

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EXPERIENCE

Research Internship with the European Space Agency, Oxford University, SA Catapult, Nvidia and UNICEF

Frontier Development Lab

- Jun 2018 – Oct 2018 Oxford, UK & Esrin, IT
- Developed an automated framework for detecting informal settlements.
 - The framework was computationally and cost efficient.
 - Had never been accomplished with low-resolution imagery before.
 - We only had 8 weeks to find the data and come up with a solution.
 - Code is open-sourced [here](#) and there is a blog post [here](#).

Research Internship with the EPSRC

Mathematical Physics Group, University of Nottingham

- June 2014 – Sept 2014 Nottingham, UK
- Supervised by Professor Gerardo Adesso, Professor Ivette Fuentes and Dr Antony Lee.
 - Developed novel techniques for analysing quantum channels and maps.

AWARDS

Academic

- Ongoing The Earth
- | | |
|-----------|---|
| 2019 | NeurIPS2019 Travel Award |
| 2018 | FDL Award for Unexpected Discovery |
| 2016-2020 | EPSRC Fully-Funded 4-Year PhD Studentship |
| 2014 | EPSRC Summer Research Award |
| 2014 | BP Ambition Award |
| 2012 | Eliahou Dangoor Scholarship |
| 2012 | PWC High Flyers Award |
| 2011 | Sir Peter Mansfield High Achiever Scholarship |
| 2011-2015 | St Ann's Experian Scholarship |
| 2011-2015 | First in the Family Scholarship |
| 2010 | Excellent Dedication and Contribution A-level Physics |
| 2010 | Interest and Enthusiasm A-level Mathematics |

Sporting

- Ongoing The Earth
- | | |
|-----------|--|
| 2016 | 11 th in age group, IronMan Copenhagen. Qualified to represent the UK for Long Distance Duathlon |
| 2016 | Silver Medal, Nottinghamshire Fell Running Championships |
| 2005-2007 | National Mini-field youth hockey champion U13 and U15 |

INVITED TALKS

- | | |
|------|---|
| 2019 | Invited by the UN to give a talk on AI for space at the AI for good global summit, Geneva, CH. |
| 2018 | Invited to the Oxford centre for Human Brain Activity to give a talk on Probabilistic Programming. Oxford, UK |
| 2018 | Invited to ESA Esrin to give a talk on using machine learning to detect informal settlements. Esrin, IT |

EDUCATION

PhD in Machine Learning

University of Oxford

Oct 2016 – Oct 2020

- Supervisors: Prof Yee Wyhe Teh • Dr Tom Rainforth • Dr Atılım Günes Baydin • Prof Phil Torr
- Developing frameworks for automating inference.
 - Machine learning for health and societal uses.
 - Published at NeurIPS, AISTATS, AAAI, etc.

MMath in Mathematics

University of Nottingham

Sept 2011 – Jul 2015 First, 75% Average

PROGRAMMING SKILLS

- | | |
|-----------------------|----------|
| Python | ●●●●●●●● |
| Pytorch, Numpy, Scipy | ●●●●●●●● |
| Matlab | ●●●●●●●● |
| Latex & Markdown | ●●●●●●●● |
| Git & Docker | ●●●●●●●● |
| Clojure & C++ | ●●●●●●●● |

TECHNICAL SKILLS

- | | |
|---------------------------------|---------------|
| Probabilistic Programming | |
| Markov Chain Monte Carlo | |
| Gaussian Processes | Regression |
| Classification | Deep Learning |
| Bayesian Inference | Time Series |
| Linear Algebra | |
| Quantum and Classical Mechanics | |
| Differential Equations | |

SOFTSKILLS

- | | | |
|-------------|--------------|-----------|
| Team Work | Agile | Observant |
| Responsible | Hard-Working | |

LANGUAGES

- | | |
|-------------------|----------|
| English | ●●●●●●●● |
| Madarin, Learning | ●●●●●●●● |
| French | ●●●●●●●● |

REFERENCES

- Several available upon request.