Bruno K. Mlodozeniec

MEng in Information and Computer Engineering

University of Cambridge

bkmlodozeniec@gmail.com Website: brunokm.github.io Github://BrunoKM LinkedIn://bkmlodozeniec

Education

University of Cambridge *2016-2020*

Master of Engineering | Computer and Information Engineering *Emmanuel College*

Year 1 Performance: 1st Class. Top 10% of class.
Year 2 Performance: 1st Class. Top 8% of class.
Year 3 Performance: 1st Class. Top 7% of class.
Year 4: 1st Class for Master's Thesis. Courses unclassed that year due to COVID-19.

Awarded Rowley Mainhood College Prize and Frank Marriott Scholarship for academic performance on exams.

Relevant coursework: Probabilistic Machine Learning, Information Theory, Optimisation, Deep Learning & Structured Data, Statistical Signal Processing, Computational Neuroscience, Foundations of Data Science, Computer Vision, Linear Algebra

Master's Thesis: ***Causal Inference: A Probabilistic Modelling Perspective*** supervised by Professor Richard Turner

Experience

Microsoft *Sep, 2020 - Sep, 2021*

AI Resident *Cambridge, UK*

- Applying Bayesian Optimization and probabilistic modelling to automatise the design of experiments in synthetic biology.

Apple *June - September, 2019*

Software Engineering and Machine Learning Intern | Siri Team *Cambridge, UK*

- Unsupervised learning methods for distributional shift detection in a team working on the Siri Voice Assistant.

University of Cambridge *August - October, 2018*

Machine Intelligence Laboratory Intern | Undergraduate Research Opportunity Project *Cambridge, UK*

- Worked with Professor Mark Gales on developing and benchmarking methods for training neural networks capable of providing useful measures of uncertainty.
- Developed and investigated a novel method for producing uncertainty-robust neural networks: *Ensemble Distribution Distillation* (published in ICLR 2020).

Harvard University | School of Engineering and Applied Sciences *July - August, 2018*

Visual Computing Group Intern *Cambridge, USA*

- Investigated novel methods for analysing large networks of synaptic connectivity in a brain through motif discovery.

Cisco Systems *July - September, 2017*

Machine Learning Intern *Oslo, Norway*

- Implemented and benchmarked NN models for speech detection at Cisco Webex.

Honours & Awards

Royal Academy of Engineering *2018*

| Engineering Leaders Scholarship *Royal Academy of Engineering, UK*

- A £5000 scholarship aimed at supporting engineering undergraduates who have the potential to become future leaders in their fields, and who are able to act as role models for the future engineers.

International Mathematical Olympiad (IMO) *July, 2015*

| Honourable Mention *Chiang Mai, Thailand*

- 2nd best score on the Norwegian team.

Societies

2018 - 2020 **Co-founder**, Cambridge University Artificial Intelligence Society *Cambridge*

- I co-founded, and chaired, the Cambridge University Artificial Intelligence Society - a student society dedicated to increasing engagement with AI/ML among students and providing opportunities for collaboration with researchers and industry.

Publications

2019 Andrey Malinin†, Bruno Mlodozeniec†, and Mark Gales. **Ensemble Distribution Distillation.** *International Conference on Learning Representations*. [† equal contributions first authorship]