Bruno K. **Mlodozeniec**

Information / Machine Intelligence Engineering Undergraduate · Third Year

Emmanuel College, St Andrew's St, Cambridge, CB2 3AP, United Kingdom

(+47) 48 18 98 52 | bkm28@cam.ac.uk | brunokm.github.io | BrunoKM | LinkedIn://bkmlodozeniec

Experience

University of Cambridge
Machine Intelligence Laboratory Intern | Undergraduate Research Opportunity Project

August - October, 2018
Cambridge, UK

- Worked with Prof Gales on detection of response relevance to a prompt for spoken language learning assessment.
- Investigated various methods for training uncertainty aware neural networks with an attention mechanism including Deep Ensembles and Deep Prior Networks, as well investigated ensemble compression using Prior Networks.
- The research I have conducted during the internship is currently being drafted into a paper.

Harvard University | School of Engineering and Applied Sciences
Visual Computing Group Intern

July - August, 2018
Cambridge, USA

- Worked on deep learning methods for motif discovery and network (graph) comparison for biological networks.
- The goal of the internship was to investigate options for analysis of large connectomics graph datasets representing biological neural networks derived from the 3D segmentation of EM brain images performed by the Visual Computing Group.

Cisco Systems
Machine Learning and Deep Learning Intern

July - September, 2017
Oslo, Norway

- Worked on Wake Word Detection for Cisco Webex.
- Trained various deep NN architectures including convolutional and recurrent neural networks for the problem of keyword spotting.
- Developed a Python routine for training, validating and testing keyword spotting models with efficient off-GPU example queuing.
- The model developed during the internship outperformed previous solutions.

Education

University of Cambridge | M.Eng. in Information Engineering
Emmanuel College

2016-2020
Cambridge, UK

Year 1 Performance: 1st Class. Top 10% of class.
Year 2 Performance: 1st Class. Top 8% of class. Awarded Rowley Mainhood College Prize for academic performance on exams.
Courses include:

Inference	Information Theory	Bioengineering	Neuroscience
Linear Algebra	Optimisation	Linear Systems	Signal Processing

Coursework includes:

- Programming: Python, C++, Version Control and Collaborative Programming with `git`, Microprocessors
- IDP: Integrated Design Project. In a team of six we collaborated to build and test an autonomous mobile robot for a student competition, including software in C++.

Additional Computer Science Modules:

Foundations of Data Science   Machine Learning and Real-world Data

Kristiansand Katedralskole Gimle
International Baccalaureate (IB)

2014-2016
Kristiansand, Norway

- IB Diploma score: 43 / 45.
- Extended Essay and Theory of Knowledge grades: A & A

Programming Skills

- Python ●●●
- TensorFlow ●●●
- PyTorch ●●○
- C++ ●●○

Honors & Awards

Royal Academy of Engineering *2018*

| Leaders Scholarship *Royal Academy of Engineering, UK*

- I was named a Royal Academy of Engineering Leaders Scholar - a scholarship scheme aimed at supporting engineering undergraduates who have the potential to become leaders in engineering and who are able to act as role models for future engineers.

International Mathematical Olympiad (IMO) *July, 2015*

| Honourable Mention *Chiang Mai, Thailand*

- 2nd best score on the Norwegian team.
- Undertaken a week-long preparation camp to develop formality and creativity in mathematical thinking, as well as improve my general problem solving skills.

Norwegian Mathematical Olympiad *March, 2016*

| 3rd place *Trondheim, Norway*

- Based on my performance in the national olympiad, I was selected to represent Norway in the International Mathematical Olympiad (IMO) and the teamwork-oriented Nordic Mathematical Olympiad (NMC)

Norwegian Physics Olympiad *April, 2016*

| Finalist *Oslo, Norway*

Societies

2018 - Now **Co-founder, Chairman**, Cambridge University Machine Intelligence Network *Cambridge*
- Co-founded a society with the aim of providing a platform for students with interest in machine intelligence to collaborate, organise workshops, and coordinate teams to participate in machine learning competitions and run machine learning projects.

2016 **Presenter**, Hackers at Cambridge *Cambridge*
- Lead a workshop sponsored by Docker on their platform for the university students.
- Collaborated to come up with ideas, prepare, and run workshops.

2014 - 2016 **Vice-president**, Amnesty International - Kristiansand Youth Division *Kristiansand, Norway*
- Initiated projects and events to of advocate against human rights violations.

Other

Languages:

Native Level:

English   Norwegian   Polish