# Sandro Moszczynski

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I have recently completed my Masters degree in Quantum Technologies at UCL. I am looking for a programming position where I can use and grow my repertoire of skills relating to machine learning and programming as a whole.

## Relevant Skills

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| **Programming:** | ○ Python (Object Orientated Programming, High Performance Computing, Tensorflow, 2-3 years experience)<br>○ C++ (Object Orientated Programming, OpenMP, 1 year of experience)<br>○ Machine Learning in C++ and Python<br>○ Matlab during undergraduate<br>○ GitHub and general project sharing experience |
| **Physical and Mathematical Understanding:** | ○ Statistical methods (to research standard)<br>○ Mathematical Modelling<br>○ Physics Modelling |
| **Teamwork:** | ○ Worked professionally for 3 years in schools as part of science departments, both alone and as a group of technicians<br>○ Worked in tight knit group as a Chef |
| **Languages:** | ○ English fluent (native)<br>○ Polish conversationally fluent<br>○ Open to learning new languages |
| **Leadership & Organisation:** | ○ Three years as President of Physics Society and a member of student council<br>○ Organised school trips and helped with organisation of science department as the sole technician.<br>○ Ran after school clubs at both schools, science club and engineering club<br>○ Organised three physics balls at Sussex, widely attended by >150 people |

## Education

**MSc in Quantum Technologies** **Merit**
*University College London,* *Sep 2019 – Sep 2020*
**Key modules:** Quantum Communication, Machine Learning with Big Data, Research with C++ and Python.

Project focused on applying machine learning techniques to quantum error correction, specifically on working with topological codes. The project was based in python with elements extending to C. An algorithm based on projective simulation papers was created for use with this project.
*External Advisor*; Dr. Brian Antao, CEO Tundra Systems.

**MSc in Physics** **Merit**
*University of Sussex,* *Sep 2014– Sep 2015*
**Key modules:** Quantum Field Theory, Symmetries in Particle Physics, Data Analysis Techniques.

My dissertation took the premise of Supersymmetry and simplified the concepts to a single U(1) gauge, estimates of particle content were then made. Subjects taken were mostly theoretical with the exception of Data Analysis Techniques.
*Advisor*; Dr. Sebastian Jaeger.

**BSc in Physics** **Second Class Honours**
*University of Sussex,* *Sep 2011– Sep 2014*
**Key modules:** Condensed State Physics, Advanced Condensed state Physics, Scicomp (Python and Matlab).

The BSc in Physics covered both experimental and theoretical topics with three years of laboratory work.

## Working Experience

**Science Technician** **London**
*Oasis Academy arena* *Sep 2018–Sep 2019*
I was employed as the sole technician in this secondary school. My responsibilities included ensuring all experiments have risk assessments and all stock is safely stored, including radioactive materials. I also delivered experiments for all three sciences and helped instruct pupils and teachers in how to best use the equipment we have.

**Physics Technician** **London**
*Harris Academy Beckenham* *Sep 2016– Sep 2018*
I was employed as a technician at this secondary school. My duties revolved around preparing practicals and being the physics specialist in the school. This requires I set up new practicals and explain physical problems to the teachers aswell as setting up clubs involving science and engineering.

**Commis Chef** **London**
*The Queens Head* (*Fullers*) *May-Sep 2016*
Worked at a busy 400 seater gastro pub. My duties involved preparing for my station and keeping it tidy. Working with the other chefs in a tight knit team and making sure service ran smoothly.