

To William Demant Fonden

Motivational letter for funding of stay in Cambridge

To Whom it May Concern,

As a part of my PhD project in Active Deep Learning for Nano-sensor Systems, I am going on an external research stay in the renowned Machine Learning Group at The University of Cambridge primo September 2019 to primo January 2020. There, I will do research in deep learning and generative models for automated design, screening and detection of medicine, by linking the underlying process between vibration of the molecular structure and Raman spectra, which is the fingerprint of molecules.

4 June 2019

MFV

This project and collaboration will lead to a great gain for our research group, the IDUN Center of Excellence and Danish industry in nano-science, pharmaceutical engineering, sensor development and signal processing, since these methods apply broadly to all kinds of spectral data and problems of decomposing signals.

This external stay holds both the greatest research environment and chance for me personally and professionally, since the work of my host supervisor there, Assistant Professor, José Miguel Hernández-Lobato, connects very well with both the subject of my Master's thesis and PhD project and will extend my field of research and professional network tremendously.

Unfortunately, there is a high bench fee, 500 GBP/month = 4,350 kr/month, for visiting students at Cambridge, which is not a part of my PhD project funding. On top of this expense, I am not allowed to sublet my apartment in Copenhagen, and will therefore pay double rent. Rent for accommodation in the city of Cambridge is quite high do to student demand, so my total double monthly rent would amount to almost 12,000.00 kr. With all these additional expenses, I will, even with my salary, have a personal financial deficit and not be able to go on this external stay without external funding from you.

I hope you can see the benefit of this external research stay for both my PhD project, DTU, Danish industry and society and will support it with 50,000.00 DKK.

Best regards,

Maximillian Fornitz Vording

PhD Student

Section for Cognitive Systems