

# Seminário em Engenharia Matemática

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14h00

Sala H211

## Machine Learning for Digital Agriculture

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### **Abstract:**

Currently, the world faces a food crisis, and is arguably on the cusp of a Malthusian crisis, where the majority of the world's population will be on the verge of starvation. Traditional advances in agriculture such as new fertilizers, and herbicides as well as GMOs are being blocked. And there is competition for agricultural land from biofuels and housing for an expanding population. Despite this, there have been major gains in crop productivity from making better decisions through the use of machine learning. This talk will discuss the current state of the application of machine learning to improve crop productivity.

### **Short biography:**

Brett is Lecturer at Liverpool Hope University and a researcher in Probabilistic Reasoning and NLP with experience in the Private Sector and Academia across four countries. His PhD and Postdoc projects involved text mining for stock market and sugar-cane market prediction. He has also worked on applied ML techniques such as Deep Learning for image classification. He has been funded by FAPESP, and he is a LIF Fellow of the Royal Academy of Engineering. He is a referee for several journals and conferences, and a member of the ACL Professional Conduct Committee. He is also an Academic Adviser for the Foreign and Commonwealth Office.

He is a member of the Laboratório de Inteligência Computacional (LABIC) research group of the University of São Paulo, and LIAAD-INESC-TEC, a research lab. of the University of Porto.