

Speaker: Prof. Amos Storkey

Talk Title: Modern Machine Learning and AI in the Context of Risk and Finance.

Talk Abstract:

Artificial Intelligence is the solution to all your known problems. At least you might think. Recent publicity hails AI as the Big Next Thing in almost all domains. Though digging deeper in many cases, by AI they actually mean logistic regression. Re-branded, of course.

Recent repeated successes of deep neural networks heralded this brave new age. And indeed they have been successful. But a closer look shows those successes are largely constrained to particular settings: images and signals; massive identically distributed datasets; extreme signal to noise; stationary settings and prediction/generation tasks.

This talk will look at how in risk and finance, many of these features are not present. We look at ways to extend the scope of neural networks and representation learning for these broader settings, and look at when other methods may be more appropriate.

Speaker Bio:

Amos Storkey is Professor of Machine Learning and AI in the School of Informatics, University of Edinburgh, with a background in mathematics (MA Maths Trinity, Cambridge) and theoretical physics (Part III Maths) before focusing on machine learning (MSc, PhD Imperial London). He moved to Edinburgh after his PhD. Over the course of his time in Edinburgh founded and organised the regular Edinburgh Deep Learning Workshop, attracting over 250 people, and is currently director of the EPSRC Centre for Doctoral Training in Data Science. Storkey leads a team of researchers working on deep neural networks, probabilistic models, transactional machine learning and efficient inference. His research balances work on fundamental methods in machine learning and application across a spectrum of research areas including medical imaging, games, music, and finance.