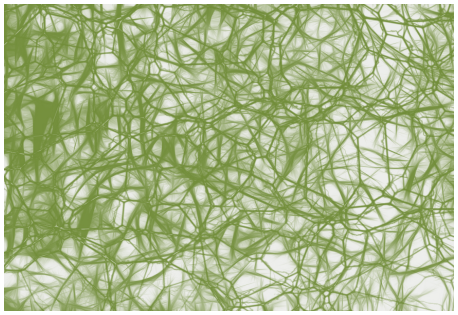
University of Bristol – Department of Computer Science
COMSM0018 (2018-19)

Applied Deep Learning Symposium



You are welcome to attend the Applied Deep Learning symposium, with talks from our MEng students on a "deep learning" topic of their choice.

Location: Queens New Wing (QB.F101)
Time: Mondays (11-2) over Wks 10-12
Format: Talks are 5 mins long and topic sessions are 40 minutes long

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Day 1 - Monday 3rd of Dec

Session: Language, Music & Audio

3/12/18	11:00	Vicky Norman	Speech recognition methods using neural nets
		Matthew Ramcharan	LSTMs and character by character text generation
		Izzy Newsham	WaveNet - modifying CNNs to generate raw audio
		Sunny Miglani	Neural Networks for Text Analysis
		Adam Stein	Using word embeddings to utilise the similarities between words in LSTMs
		Vansh Dassani	Audio Super-Resolution Using Neural Nets

BREAK

Session: Machine Learning

3/12/18	11:35	Stefan Klas	Using LSTMs for time series forecasting
		Grant Stevens	Evolutionary Generative Adversarial Networks
		Liam Wheen	Evolutionary Algorithms
		Gareth Carless	Local Interpretable Model-agnostic Explanations
		Walter Restelli-Nielsen	Reusing trained neural networks (Transfer Learning)
		Codrin Popa	Training and inferencing in low precision

BREAK

Session: Artificial Intelligence

3/12/18	12:20	Michael Sheehan	Mastering the Game of Go without Human Knowledge
		Karim Allaouat	Deep Learning applied to Chess
		Mark Fitzsimmons	Deep Learning applied to connect 4
		Nikita Hukerikar	Deep Q-Learning
		Lidia Teleoaca	Deep Learning for Video Game Playing
		Esta Cooksley	Creative Adversarial Networks (CAN AI Create Art?)

Day 2 - Monday 10th of Dec

Session: Theory & Architecture

10/12/17	11:00	Ahmer Butt	Using Stochastic Autoencoders for Denoising
		Min Nguyen	Applications of Recursion Schemes on Neural Nets
		Arthur Dodson	Introducing dynamically expandable neural networks
		Sydney Dimmock	A Gaussian process approach to Neural Networks
		Catherin Easdon	Explainable DNNs: what has your network really learnt?
		Raef Coles	Techniques for online deep learning
		Rachel Jeffries-Harris	Mode Collapse in GANs

BREAK

Session: Computer Vision I

10/12/17	11:40	Zaiyang Li	YOLO and R-CNN, state of art in object detection
		Bilal Kazi	Network in Network architecture
		Iwan Pettifer-Cole	Deeper into Convolutions, Inceptionism
		Benny Clark	Unsupervised Deep Learning for Optical Flow Estimation
		Ben Fossett	Deep Learning for Animal Identification
		Manan Rajan Vaswani	VoxelNet: End-to-End Learning for Point-Cloud based 3D Object Detectio

BREAK

Session: Computer Vision II

10/12/17	12:15	Ellis Pridgeon	Image to Image Translation
		Kyle Welch	Photorealistic Gaze manipulation
		Maja Schneider	Deep virtual stereo odometry
		Louis Wyborn	Image Style Transfer using Convolutional Neural Networks
		Matthew Clifford	How can 2D data help 3D object recognition?

BREAK

Session: Computer Vision III

10/12/17	12:45	Spencer Warren	Deep learning & super resolution
		George Ball	Facial Recognition
		Greg Sims	Reading your mind with a generative adversarial network (using fMRI scans to reconstruct images)
		Tom Jager	Self-Attention Generative Adversarial Networks
		Aatina Punjabi	Image inpainting for irregular holes using partial convolutions

Day 3 - Monday 17th of Dec

Session: Computer Graphics & Security

17/12/17	11:00	James Tait	Denoising graphical renders
		Callum Pearce	Deep learning in real-time raytracing
		Bradley Miles	Rendering Atmospheric Clouds with Radiance-Predicting Neural Networks
		Eleanor Cox	Audio-Driven Facial Animation
		James Keen	Adversarial Attacks
		Anthony Wharton	One Pixel Attacks

BREAK

Session: Applications

17/12/17	11:35	Alvaro Furlan Falcao	Deep Learning replicating algorithmic traders
		Tristan Winstanley	Sense of touch for robots using Deep Learning
		Rory Hicks	Deep Learning for Autonomous Vehicles
		Aidan Ball	The application of Deep Learning to compound discovery through the use of smile notation
		Alessio Zakaria	Graph Conv. Neural Networks for Web-scale Recommender Systems
		Ben Davies	Modelling Migration through Deep Learning
		Ibrahim Qasim	Active learning for more accurate prosthesis

BREAK

Session: Hardware

17/12/17	12:15	Matthew Co	Neural Network Processors and how they're optimised for deep learning
		Jamie Terry	The Evolution of Memory Architectures for Deep Learning Hardware Accelerators