

Analytics, Data Science Decision Making Summer School 2023
DRAFT PROGRAMME (subject to change)

Monday, 24 July 2023					
0830-0930	Registration (STEM building)				
Focus	Cross theme	Cross theme	BCI	R	Machine Learning
0930-1030	Introduction to Python	Ethics, Data Protection, Security, and Liability in the Age of Big Data	A Hands-On Introduction to Non-Invasive Neural Interfaces	Functions, control flow, and automation	Intro to Machine Learning
1030-1100	Break				
1100-1230	Introduction to Python	Ethics, Data Protection, Security, and Liability	A Hands-On Introduction to Non-Invasive Neural Interfaces	Functions, control flow, and automation	Intro to Machine Learning
1230-1330	Lunch break				
1330-1500	Introduction to Python	Ethics, Data Protection, Security, and Liability	A Hands-On Introduction to Non-Invasive Neural Interfaces	Functions, control flow, and automation	Intro to Machine Learning
1500-1530	Break				
1530 -1700	Introduction to Python	Ethics, Data Protection, Security, and Liability	A Hands-On Introduction to Non-Invasive Neural Interfaces	Functions, control flow, and automation	Intro to Machine Learning
1730-1900	Welcome reception (Lakeside Room)				

Tuesday, 25 July 2023				
Focus	Deep learning	BCI	R	Machine Learning
0930-1030	*Intro to Tensorflow and Deep Learning	A Hands-On Introduction to Non-Invasive Neural Interfaces	Introduction to Data Visualisation Using R	Tree-based Models for Machine Learning in Data Analytics
1030-1100	Break			
1100-1230	Intro to Tensorflow and Deep Learning	A Hands-On Introduction to Non-Invasive Neural Interfaces	Introduction to Data Visualisation Using R	Tree-based Models for Machine Learning in Data Analytics
1230-1330	Lunch break			
1330-1500	Intro to Tensorflow and Deep Learning	A Hands-On Introduction to Non-Invasive Neural Interfaces	Introduction to Data Visualisation Using R	Tree-based Models for Machine Learning in Data Analytics
1500-1530	Break			
1530 -1700	Intro to Tensorflow and Deep Learning	A Hands-On Introduction to Non-Invasive Neural Interfaces	Introduction to Data Visualisation Using R	Tree-based Models for Machine Learning in Data Analytics
1730-1815	Keynote speech TBC (EBS 2.2)			

*Please note the following courses will begin at 0900 not 0930. Intro to Tensorflow and Deep Learning and Recurrent Neural Networks with Keras.

Wednesday, 26 July 2023					
Focus	Optimisation	Deep learning	BCI	R	Machine Learning
0930-1030	Synergy of Optimisation and Machine Learning 1	*Recurrent neural networks with Keras	A Hands-On Introduction to Non-Invasive Neural Interfaces	Bayesian Analysis in R 1	Machine learning for causal inference from observational data
1030-1100	Break				
1100-1230	Synergy of Optimisation and Machine Learning 1	Recurrent neural networks with Keras	A Hands-On Introduction to Non-Invasive Neural Interfaces	Bayesian Analysis in R 1	Machine learning for causal inference from observational data
1230-1330	Lunch break				
1330-1500	Synergy of Optimisation and Machine Learning 1	Recurrent neural networks with Keras	A Hands-On Introduction to Non-Invasive Neural Interfaces	Bayesian Analysis in R 1	Machine learning for causal inference from observational data
1500-1530	Break				
1530 -1700	Synergy of Optimisation and Machine Learning 1	Recurrent neural networks with Keras	A Hands-On Introduction to Non-Invasive Neural Interfaces	Bayesian Analysis in R 1	Machine learning for causal inference from observational data
1830-2100	Dinner at Wivenhoe House Hotel				

Thursday, 27 July 2023					
Focus	Optimisation	Deep learning	BCI	R	Cross theme
0930-1030	Synergy of Optimisation and Machine Learning 2	Learning Under Different Training and Testing Distributions	A Hands-On Introduction to Non-Invasive Neural Interfaces	Bayesian Analysis in R 2	Intro to Startups for Data Scientists, Analysts and Machine Learning Engineers
1030-1100	Break				
1100-1230	Synergy of Optimisation and Machine Learning 2	Learning Under Different Training and Testing Distributions	A Hands-On Introduction to Non-Invasive Neural Interfaces	Bayesian Analysis in R 2	Intro to Startups for Data Scientists, Analysts and Machine Learning Engineers
1230-1330	Lunch break				
1330-1500	Synergy of Optimisation and Machine Learning 2	Learning Under Different Training and Testing Distributions	A Hands-On Introduction to Non-Invasive Neural Interfaces	Bayesian Analysis in R 2	Intro to Startups for Data Scientists, Analysts and Machine Learning Engineers
1500-1530	Break				
1530 -1700	Synergy of Optimisation and Machine Learning 2	Learning Under Different Training and Testing Distributions	A Hands-On Introduction to Non-Invasive Neural Interfaces	Bayesian Analysis in R 2	Intro to Startups for Data Scientists, Analysts and Machine Learning Engineers

*Please note the following courses will begin at 0900 not 0930. Intro to Tensorflow and Deep Learning and Recurrent Neural Networks with Keras.

Friday, 28 July 2023					
Focus	Cross theme	Cross theme	Cross theme	R	Cross theme
0930-1030	Introduction to Network Science	Federated Learning	Empowerment	GIS Systems in R	Best Practice Analytics
1030-1100	Break				
1100-1230	Introduction to Network Science	Federated Learning	Empowerment	GIS Systems in R	Best Practice Analytics
1230-1330	Lunch break				
1330-1500	Introduction to Network Science	Federated Learning	Empowerment	GIS Systems in R	Best Practice Analytics
1500-1530	Break				
1530 -1700	Introduction to Network Science	Federated Learning	Empowerment	GIS Systems in R	Best Practice Analytics

*Please note the following courses will begin at 0900 not 0930. Intro to Tensorflow and Deep Learning and Recurrent Neural Networks with Keras.