University of Essex

Analytics, Data Science and Decision Making

Summer School

The sixth annual Analytics, Data Science, and Decision Making Summer School provides graduates, postgraduates, researchers, academics, business professionals, and practitioners, with the opportunity to join leading academics, data scientists, and engineers from around the world to explore the latest advancements in computer science.

Immerse yourself and network with influential data science leaders from organisations such as BT, Preqin, Orbital Media, Reveris, and more, providing training topics that include:
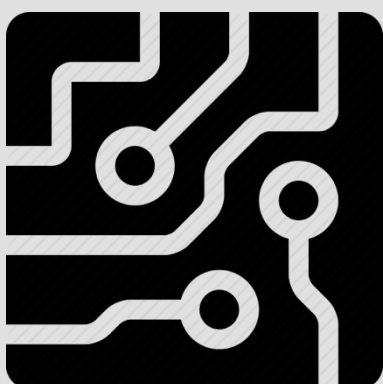
- Deep Learning and Neural Networks
- Natural Language Processing
- Practical applications such as in business, health, and other sectors
- The legal, ethical, and human rights implications of data

With our one or two week programmes, courses are delivered over parallel sessions.

Our great value ticket prices include:

- Introductory and intermediate courses
- Real industry experience
- Online DS Networking
- Endorsed certification

REGISTER FOR YOUR PLACE TODAY

IADS
The Institute for Analytics and Data Science

26 July – 6 August 2021

iadssum@essex.ac.uk | www.iadssummerschool.com

Best Practice Analytics
Focus: Data Science Management
Dr Detlef Nauck, BT

Introduction to R
Focus: Intro to R
Dr Ben Skinner, Dr David Clark, Dr Antonio Marco

Introduction to Machine Learning
Focus: Intro to ML
Dr Luca Citi

Data Protection, Security, and Ethics in the Age of Big Data
Focus: Data Science Management
Dr Audrey Guinchard and Professor Anthony Vickers

Deep Learning for Images and Text
Focus: Intro to Deep Learning
Dr Haider Raza

Data Science Management in Business
Focus: Data Science Management
Thomas Tosstorff, Preqin

Learning Under Different Training and Testing Distributions
Focus: Continued Deep Learning Topics
Dr Haider Raza

GIS Systems in R
Focus: Advanced R Topics
Dr David Clark

Introduction to Natural Language Processing
Focus: NLP
Dr Diana Maynard

Advanced R
Focus: Advanced R Topics
Dr Anna Hughes and Dr Alasdair Clarke

Traditional and Deep Learning Methods for Word Representations
Focus: NLP
Dr Sathish Sankarpandi

Practical text analytics and sentiment analysis from social media
Focus: NLP
Dr Diana Maynard University of Sheffield

Introduction to Tensorflow and Deep Learning
Focus: Continued Deep Learning Topics
Dr Michael Fairbank

The Synergy of Optimisation and Machine Learning
Focus: Optimisation Topics
Dr Daniel Karapetyan and Dr Andrew Parkes

Tree-based Models for Machine Learning in Data Analytics
Focus: Intro to ML
Dr Dheeraj Rathee

Bandits, Learning, and Search
Focus: Optimisation Topics
Dr Tom Vodopivec, Reveris

Learning with Small Datasets
Focus: Intro to ML
Viola Fanfani, University of Edinburgh

Infrastructure Management Topics (TBD)
Focus: Data Science Management
Nathan Cunningham, Norwich Bioscience Institute

Interpreting Classifiers
Focus: Introduction to Deep Learning
Oana Cocarascu, Kings College London

Introduction to Data Visualisation in R
Focus: Advanced R Topics
Dr Ben Skinner, Dr David Clark, Dr Antonio Marco

Recurrent Neural Networks with Keras
Focus: Continued Deep Learning Topics
Dr Michael Fairbank

Transfer Learning with Transformers in NLP
Focus: NLP & Continued Deep Learning
Husam Quteineh

Introduction to Network Science
Focus: Optimisation Topics
Dr Philip Leifeld

Machine learning for causal inference from observational data
Focus: Intro to Machine Learning & Intro to R
Damian Machlanski

Monday 26 July
Opening day of our summer school will feature an Intro to Python course for all delegates!
Hosted by Dr. Haider Raza and Dr Sefki Kolozali

Friday 6 August
Our final day of the programme will feature business industry projects; an opportunity to work on solutions to a real life data science problem in the industry!
Industry hosts: G's Group, Preqin & Suffolk County Council