

AI and Big Data: Human technology

Date: Wednesday 21st November 2018

Time: 3:00pm – 6.00pm

Venue: University of Bradford STEM Centre and Horton Computing Labs



Ignite is a partnership between teachers, academics and employers sharing STEM research, curriculum and skills knowledge. We would like to invite you to attend our FREE masterclass series, developed by teachers for teachers to incorporate exciting cutting-edge research into the classroom. Refreshments and cake provided!

Summary

This unique professional development experience brings together two fascinating areas of cutting edge research - Artificial Intelligence and Big Data. You will hear from academics at the forefront of this research, explore the University's research facilities and take part in a cutting edge facial recognition experiment.

We will signpost links that can be made between subjects i.e. computing, maths, biology and chemistry and demonstrate how careers options are evolving within STEM subjects with the advent of new and exciting technologies.

Workshop 1: Professor Daniel Neagu, AI Research (AIRe) Group Leader: Mining Open Data

Big Data technologies offer new opportunities to access, collect and share vast amounts of digital information. The talk reviews definitions, context, policies, resources, applications, challenges and opportunities from using Open (Big) Data. Applications developed by the University of Bradford researchers and students, based on KNIME, WEKA, R, Python platforms, will be demonstrated.

Workshop 2: Professor Hassan Ugail

Geometric design and visualisation, computer based physical analysis and design optimisation fall into the broad area of research known as Simulation Based Design. This talk and demonstration will showcase a method which maps out key features, such as the shape of the cheek, mouth and forehead, of a face at a certain age. This information is fed to a computer algorithm which synthesises new features for the face to produce photographic quality images of the face at different ages, a technique designed to aid in locating missing children and adults by showing how they may have changed over time.

Professor
Daniel
Neagu



Professor
Hassan
Ugail



Outcomes

You will be able to:

- work with academics to explore cross curricular links to bring AI and Big Data to life
- Explore basic programming techniques in a Big Data context
- take away compelling classroom ideas that will appeal to a wide range of students
- Gain insight into how these areas of study are applied in the real world and the career opportunities they open up