CDRC Training and Capacity Building Activities

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Training and Capacity Building

CDRC is investing significant resources in developing data science capability to ensure that the workforce has the skills to compete in the emerging and rapidly expanding area of data analytics.

- Short courses
- Internships and Fellowships
- MSc Programme in Consumer Analytics and Marketing Strategy
- Masters dissertation programme

Training: Short Courses

The Centre offers short courses in data analytics in an effort to build capacity at a local and national level. Whenever possible our courses are offered to both academics and non-academics.

- **R courses** – Introductory, Intermediary and advanced R, Forecasting in R

- **Big Data courses**
  - Big Data and Predictive Analytics for Social Science Research
  - R for Big Data

- **Courses and webinars on Data Visualisation and Tableau**

- **Retail Location Analysis Workshops**

- **QGIS and Retail Analytics courses**

- **GIS courses** – (vector/raster/QGIS) – geospatial data analysis in a range of domain areas: Transportation, Crime and Health Science.

More Info: https://www.cdrc.ac.uk/events/category/training-session/

Internships and Fellowships

Programmes are aimed at equipping individuals with the skills to compete in the workforce.

- **Internship Programme**
  - Launched in October 2015
  - Standard internships are 3 months in duration and are salaried
  - Individuals work on projects defined by the Centre
  - New CDRC Data Scientist Internship scheme to begin in September

- **Fellowship programme**
  - Postgraduate programme where individuals apply to the Centre to work on projects of their design using Centre data.
  - Expenses only

Consumer Data Research Centre

An ESRC Data Investment

CDRC Interns 2016
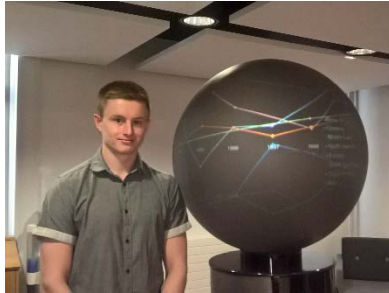
"I hope to gain skills in machine learning and further develop my knowledge and understanding of statistics. These are all relevant skills which will help me with my PhD starting later this year."

Samuel Sheen

"I hope to gain experience working in an academic team and contributing to a research paper and I hope to discover whether this is the area I would like to do a PhD in."

Rebecca Atkinson
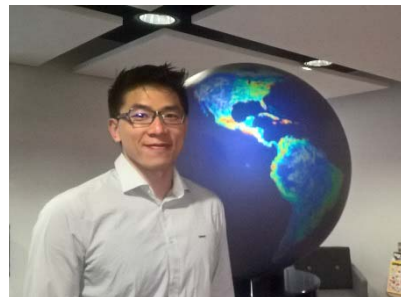
"I am aiming to learn the basic analytic skills for Big data during the internship as well as advanced data mining and screening skills for big data sets."

Dr Jen-Hsien Hsu

"I am hoping to gain more experience and expertise, and interesting new data sets to work with."

Dr Ilan Fridman Rojas

Benefits to individuals

- Own delivery of project and get hands-on experience using real data
- Establish links with project partners and work to provide solutions to real world challenges
- Build skills and knowledge in advanced analytics through mentorship and on-site training opportunities in statistical analysis, visualisation and computer programming.

Impact

- Driving research activity across CDRC core research areas
- Generating exemplars and case studies
- Outputs are helping Centre to develop infrastructure and applications for wider use across the Big Data community.

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Education

MSc Consumer Analytics and Marketing Strategy 2016

🖱 Apply   📅 Open Event

Get the practical skills to analyse consumer data and develop marketing strategy

Key facts

- **Start date:** September 2016
- **Duration:** 12 months full time
- **Entry requirements:** A bachelor degree with a 2:1 (hons) **Full entry requirements.**
- **Language requirements:** IELTS 6.5 overall, with no less than 6.0 in any component **Full language requirements.**
- **UK/EU fees:** £10,000
- **International fees:** £19,000

Overview ⊖

The digital revolution has led to an unprecedented volume of information about consumers, which progressive organisations are eager to understand and use. This innovative Masters degree will give you the practical skills to analyse consumer data and provide insights for successful marketing strategies.

Taught by leading academics from the Business School and School of Geography, you'll explore a range of analytical techniques including applied Geographic Information Systems (GIS) and retail modelling, consumer and predictive analytics and data visualisation. You'll also develop the softer skills to use the results of these analyses to inform decisions about marketing strategy.

Thanks to our connections with businesses worldwide, you'll have access to emerging trends in topics such as consumer behaviour, decision science and digital and interactive marketing. You'll further develop your practical skills with the opportunity to work on a live data project provided by a company.

Useful links

▶ **Careers**

▶ **International Students**

▶ **Fees and Funding**

MSc in Consumer Analytics and Marketing Strategy

- Huge international commercial interest in big data analytics and related marketing strategies

- Well-noted lack of appropriate graduates with big data skills – especially combined with 'soft skills' to influence strategic decisions

- Programme is novel in combining tuition in consumer analytics with insight on marketing strategy

- Furnishes retailers and other employers with graduates who have these skills

- Connects **big data analytics and retailing**/consumer facing orgs.

Overview of the Programme

- University of Leeds based initiative led by the Business School and School of Geography

- First student intake Sept 2016
  - Cohort of 30-40 this year
  - Projected intake of 100 students in 2019-20

- Partners such as Jaywing are contributing content for the programme

Research Masters Dissertation Programme

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Project Description	Sponsor	Status
Using Big Data to understand the drivers behind store footfall. [PDF]	The co-operative	Open
Understanding the Grocery Click & Collect Customer. [PDF]	Sainsbury's	Open
Explorative and Interactive Visualisation of Data [PDF]	Sainsbury's	Open
Dark Data [PDF]	Sainsbury's	Open
Effect of store locations and other factors on geographic sales density. [PDF]	Thomas Cook	Closed
The size and placing of promotional banners on a website. [PDF]	SHOP DIRECT	Open
An investigation of what triggers customer activation of credit facilities. [PDF]	SHOP DIRECT	Open
Generating a linguistic algorithm to interpret shoppers' comments and how this affects their shopping experiences and behaviour. [PDF]	CACI	Closed

Research Masters Dissertation Programme

- Call to partners for projects goes out in October
- Projects defined and returned in December and advertisements out by January.
- Application period Jan-March
- Projects are undertaken over May – August
- Students have 2 supervisors – 1 industry and 1 academic
- Each student receives a £500 bursary on project completion
- Top 3 receive prizes at CDRC supported conference

Student benefits and Impact

Students participate because they:

- gain insight into business world
- gain access to real world data and insight into business analytics
- form relationships with industry that have translated into longer term opportunities.

Testimonials

"The CDRC Masters Dissertation Research Programme provided me with a great opportunity to showcase the skills learnt during my masters through the use of real-world business data. Working with an industry partner enabled me to gain an insight into how location analysis methods are used in business, which was very insightful".

Impact

One student working with British Gas to identify vulnerable energy customers using smart meter data, stated: " (this research) opens up a clear possibility to use machine learning techniques not just for operational research but also for public policy research that aims at informing policy interventions in the energy sector.'

Industry Benefits and Impact

Industry participates as it enables them to:

- Undertake 'horizon-scanning' projects that they otherwise wouldn't have the time or resource to undertake
- Maximize value of in-house data via linkage with open, traditional sources
- Students assist partners on important strategic and operational issues (e.g. customer insight, multichannel marketing, predictive modelling)

Industry Benefits and Impact

Customer Insights Manager, British Gas, says "Anastasia's work on consumption patterns for vulnerable customers suggests there is potential to use this in a more proactive approach to the identification of vulnerability within our customer base. The chance to better identify and meet these customers' needs is something we hope to pursue in an ongoing collaboration with University College London."

Community Plan Manager, Tesco.com
"I would definitely say the relationship has been very useful. For my own project, it was very productive to have a dedicated researcher to bring academic rigour and investigative ability to the knotty and overwritten realm of making a business case for green. The partnership also had the benefits of educating the student in the corporate world and the different needs and drivers within that arena. A win-win for both sides."

Useful links/Contacts
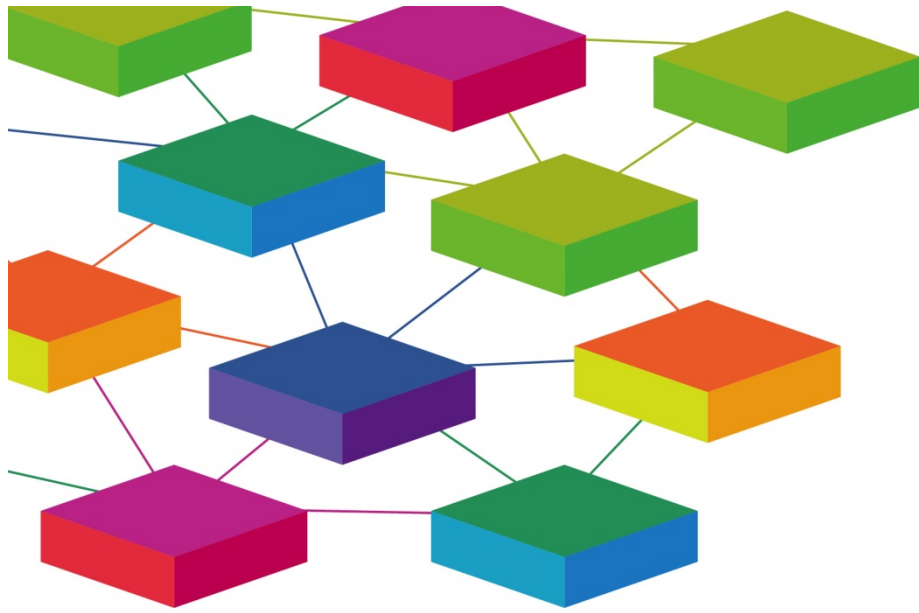
Find out more about the CDRC at:
https://www.cdrc.ac.uk/

At Leeds, CDRC is housed within the Leeds Institute for Data Analytics: http://lida.leeds.ac.uk/

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