



**Faculty of Environment and Faculty of Medicine and Health
Leeds Institute for Data Analytics**

Data Scientists Internship

Six posts available for a period of 4 or 8 months (alternative durations may be negotiated for suitable candidates)

Available from 1 September 2016

The Leeds Institute for Data Analytics (LIDA) is offering 6 internships to help to drive research activity across each of LIDA's constituent areas: medical bioinformatics, consumer data research and multidisciplinary data analytics.

The LIDA internship programme provides an outstanding opportunity to develop skills that are in high demand, both nationally and globally, within a new, state-of-the-art facility. Our offer to interns includes the chance to:

- Own delivery of a data science project and get hands-on technical experience using real data
- Establish links with project partners (internal or external) and work to provide solutions to real world challenges
- Build skills and knowledge in advanced analytics, not only through mentorship and applied research, but also through on-site training opportunities in statistical analysis, visualisation, research methods and computer programming
- Work alongside leading scholars as part of the LIDA team and gain valuable work experience

The Leeds Institute for Data Analytics bring together applied research groups and data scientists from a range of disciplinary backgrounds, all of whom are working with data and the latest technologies to generate exciting new evidence on human health and society.

Established in 2014 with major investments from the UK Research Councils and the University of Leeds, LIDA has developed state-of-the-art physical and IT infrastructures to raise the bar in standards of data quality, access, protection and exploitation. The twin pillars of LIDA are the ESRC funded Consumer Data Research Centre (CDRC) and MRC funded Medical Bioinformatics Centre. In addition, the Institute supports multidisciplinary projects drawn from across campus and involving external partners. LIDA already has an impressive track record of partnership working with the private, public and charitable sectors and looks set to become a northern powerhouse for research, civic engagement and business growth. The Institute is also 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. The Data Scientist Internship programme is very much at the heart of that investment and capacity-building objective.

We are looking for recent undergraduate or Master's students in a relevant field who have excellent numerical skills that may have been gained in the context of quantitative social science, computing, mathematics/statistics, medical bioinformatics or population studies.

University Grade 5 (£21,605- £25,023 p.a.)

Informal enquiries may be made to Professor Mark Birkin, Director of LIDA, tel +44 (0)113 343 6838, email m.h.birkin@leeds.ac.uk or Professor Sir Alex Markham, tel +44 (0)113 343 8608, email a.f.markham@leeds.ac.uk.

Ref: MHLDA1005

Click here for further information about working at the University of Leeds
www.leeds.ac.uk/info/20025/university_jobs

Job Description

Responsible to: Head of School
Reports to: Director of LIDA

Main duties and responsibilities

You will help to drive research activity across each of LIDA's constituent areas: medical bioinformatics, consumer data research and multidisciplinary data analytics. While each project will vary, interns will broadly be expected to:

- Undertake quantitative analysis on core datasets
- Plan their own research activity in collaboration with the project investigators and other members of the research team
- Meet with clients and partners in support LIDA's partnership-building efforts
- Participate in LIDA research meetings and seminars
- Contribute to written outputs, including research papers, case studies and other materials for publication
- Any other duties as may reasonably be required, consistent with the grade of the post

University Values

All staff are expected to operate in line with the University's values and standards, which work as an integral part of our strategy and set out the principles of how we work together. More information about the University's strategy and values is available at <http://www.leeds.ac.uk/comms/strategy/>.

Person Specification

Essential

- Excellent all-round numerical skills that may have been gained in the context of quantitative social science, computing, mathematics/statistics, medical bioinformatics or population studies
- You will have completed an Undergraduate or Master's degree in a relevant field
- You will be passionate about using data to answer real life questions using statistical or predictive techniques
- Good communication skills (verbal and written)
- Willingness to work as part of a team

Desirable

- Experience of working with large unstructured data sets
- Knowledge of data science, machine learning or data mining

Additional Information

The University offers generous terms and conditions of employment, a wide range of benefits, services, facilities and family friendly policies. Full details are available on the Human Resources web pages accessible at www.leeds.ac.uk/hr

Disclosure and Barring Service checks

A Disclosure and Barring Service (DBS) Check is not required for this position. However, applicants who have unspent convictions, cautions, reprimands and warnings, including any pending criminal proceedings must indicate this in the 'other personal details' section of the application form and send details to the Recruitment Officer at disclosure@leeds.ac.uk.

Disabled Applicants

The post is located in the Leeds Institute for Data Analytics. Disabled applicants wishing to review access to the building are invited to contact the department direct. Additional information may be sought from the Recruitment Officer, email disclosure@leeds.ac.uk or tel + 44 (0)113 343 1723.

Disabled applicants are not obliged to inform employers of their disability but will still be covered by the Equality Act once their disability becomes known.

Further information for applicants with disabilities, impairments or health conditions is available in the applicant guidance.

Further Information

Previous internship projects have used novel data sources to reveal new evidence on topics such as the London housing market, Twitter and mobility patterns, medical text analytics and consumer behaviour. Projects for the new programme will span both the medical and social sciences. Exemplar projects currently under consideration include one looking at how visualisation methods can help us derive insight into complex spatio-temporal movements, and another focusing on how predictive analytics of footfall data can help us better understand population flows.

For more detailed information on project opportunities, please contact Professor Mark Birkin (details below). Please also note that project details will be subject to contract and will be dependent, in part, on the skill sets and interests of the successful candidates.

Benefits and Outcomes

Benefits to the Individual

The LIDA internship programme provides individuals with an outstanding opportunity to develop skills that are in high demand, both nationally and globally, within a new, state-of-the-art facility. Interns will each be assigned a mentor who will support them throughout their time at the Institute and ensure they obtain the maximum benefit from the experience. Our offer to interns includes the chance to:

- Own delivery of a data science project and get hands-on technical experience using real data
- Establish links with project partners (internal or external) and work to provide solutions to real world challenges
- Build skills and knowledge in advanced analytics, not only through mentorship and applied research, but also through on-site training opportunities in statistical analysis, visualisation, research methods and computer programming
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Benefits to LIDA and the University

The data scientist interns will play a pivotal role in driving research across all of LIDA's core areas and in generating exemplars and case studies. Their outputs will be important in assisting the Institute to develop infrastructure and a wider resource of applications for use across the Big Data community. By working on multidisciplinary projects as part of an integrated cohort, the interns will also help promote LIDA's standing as a campus-wide resource capable of supporting diverse, high-quality, high-impact research.

Management/ Supervision

Individual projects will be coordinated by members of the LIDA research network, including project leaders of the national research centres (Consumer Data Research Centre and Medical Bioinformatics Centre), and under the overall management of LIDA's Director, Professor Mark Birkin.