

## Senior Research Data Scientist (IIDSAI) - IT Services - Grade 8 - 101402

Senior Research Data Scientist (IIDSAI) - IT Services - Grade 8 - 101402Add Job to My Job Selections

United Kingdom

Show Search Results

### Job Identification

1723

### Job Category

Specialist/Professional

### Locations

- Edgbaston, Birmingham, West Midlands, B15 2TT, GB

### Posting Date

03/04/2023, 00:01

### Apply Before

02/05/2023, 23:59

### Job Schedule

Full time

## Job Description

### Position Details

IT Services

Location: University of Birmingham, Edgbaston, Birmingham UK

Full time starting salary is normally in the range £44,414 to £52,841 with potential progression once in post to £59,450

Grade 8

Full Time, Fixed Term Contract for up to five years.

Closing date: 02 May 2023

### Background\_

The University of Birmingham aspires to establish itself as a World Top 50 university by 2030, and the [Advanced Research Computing](#) department (ARC) has a key part to play in achieving this aim. ARC is a well-respected, award-winning team with a national and international profile. Our team is continuously growing, and we are excited to announce that we are looking for talented individuals to fill seven brand new posts:

- Senior ARC Systems Engineer
- Senior Research Software Engineer and Manager
- Senior Research Data Scientists (3 posts)
- Research Applications Specialist

- Summer student – Research Software Assistant

For further details of these posts please see our [blog](#).

Two positions are available for this vacancy. We also have another Senior Research Data Scientist post available under an alternative funder; interested candidates will be considered for all three positions.

The University of Birmingham is a global institution working within a diverse and vibrant City, offering an inspiring education to our students, and undertaking critically important research. We are a place of open, critical thinking, and the creation, sharing and dissemination of knowledge. Professional Services put students at the heart of all they do and enable an exceptional educational experience. They provide outstanding support to our researchers and help the University to grow its influence regionally, nationally, and globally. They ensure the University's resources are used wisely, manage and improve the infrastructure which sits at the heart of the institution, and support decisions to be made quickly and based on sound evidence. Our [Birmingham Professional programme](#) operates across the University, supporting colleagues to network and collaborate, offering opportunities to learn and develop, contributing to the delivery of the University's objectives, and helping everyone to understand the broader context within which we work.

### **Department Summary**

The Institute for Interdisciplinary Data Science and AI (IIDSAl) is a nexus for collaborative research and education at the University of Birmingham. Working across all five Colleges, the Institute is developing and fostering a culture of continuous interaction to address important challenges in areas including sustainability, equality, health, and data-driven science. We are building on a foundation of excellence in methodology including modelling, statistics, machine learning, linguistics, optimisation, behavioural sciences, and the social, ethical, and legal implications of technology.

Advanced Research Computing (ARC) builds and runs a range of specialist services for researchers, collectively known as BEAR (Birmingham Environment for Academic Research). Serving all disciplines, BEAR covers an increasingly broad spectrum of needs, ranging from the traditional HPC through data storage and archiving requirements to tools for collaboration and analytics as well as offering 'on premises' cloud and web-based data science tools. ARC also supports the exploitation of specialist regional and national services, including HPC Midlands Plus and the Birmingham-based Baskerville Tier 2 AI supercomputer funded by EPSRC. Together with the national supercomputer Archer (Tier 1) and Birmingham's own BEAR infrastructure, they form a powerful resource for research.

### **Role Summary**

This Senior Research Data Scientist post is funded by the Institute for Interdisciplinary Data Science and AI (IIDSAl), and is operationally based in the Research Software Group (RSG), part of Advanced Research Computing (ARC) in IT Services.

The postholder will join a strong and dynamic group of Research Software Engineers, Research Application Specialists and a new cohort of Research Data Scientists with a particular focus on supporting researchers. While this post is funded by and its priorities set by the IIDSAl, the postholder will be operationally based (and line managed) in the Research Software Group (RSG) in ARC.

The Senior Research Data Scientist (RDSc) will collaborate closely with researchers from many different academic disciplines and will provide expert knowledge and skills to analyse, visualise, explore, and extract knowledge from all kinds of research data. They will provide training in their areas of expertise as well as promote the associated best practices. The RDSc is not expected to start with a full set of skills but should have a good base of experience and strong skills in some areas and a commitment to learn and build on them, staying up-to-date with the latest advances in a fast-moving field.

## Main Duties

- Take responsibility and work collaboratively with research groups from across the University on the definition, documentation, development and satisfactory completion of collaborative data science projects: defining requirements; devising solutions; agreeing timescales and priorities as well as identifying the risks to be managed. Each of these engagements will be unique in nature and complexity and range from a few days to many months' duration.
- Disseminate good practices in the areas of data science, AI, data engineering, data visualisation etc. – leading to new insights into research problems.
- As part of the broader RSG, provide Advice, Support, Coaching, and Data Science, Analytics, Engineering or Coding services; crucially always with the aim of ownership and responsibility remaining with the research group. In this busy environment, prioritisation, and communication are key to manage expectations.
- Build and maintain relationships with research communities within the University and beyond, seeking opportunities to actively contribute to research or funding bids. This will mean defining the scope of work and the associated costs for data science support for the grant applications as well as the associated IT infrastructure and support costs. Contribute to research papers to be published in academic literature and produce case studies.
- Contribute to raising awareness of the IIDSAI and ARC/BEAR's services for researchers and the profile of the IIDSAI and ARC. Help build active user communities locally and regionally, by contributing to seminars and networking events, encouraging the adoption of best practice, sharing knowledge and expertise.
- Deliver training courses, devising content where applicable or, where qualified, delivering externally validated material, e.g. Data Carpentries. Content will vary from introductory to specialized and advanced levels.
- Liaise and engage with external professional networks within the data science and software engineering sectors, such as national RSE networks, the Alan Turing Institute and the Software Sustainability Institute, to keep informed of the latest developments and sector initiatives.
- Identify opportunities for service improvement, such as introducing new data science tools or techniques to existing services, and propose and develop innovative solutions to enrich the user experience, to enhance service delivery, and reduce costs or environmental impacts.
- Maintain an awareness of technical developments, tools and ideas in data science and in software engineering, including attending seminars, technical briefings, conferences and technical groups.
- In addition to University provided training and development, you will undertake sufficient personal and professional development, ensuring skills and knowledge are up to date so that the role is performed to the required level.
- Promotes equality and values diversity acting as a role model and fostering an inclusive working culture.
- Any other duties commensurate with the role and grade.

## Person Specification\_

- Formal education to degree level or equivalent experience, preferably in a subject with a strong software development component.
- Relevant experience carrying out or supporting data science, data engineering or informatics projects, preferably in a research environment.
- Supporting researchers with complex requirements is desirable.
- Broad and deep knowledge of data science or data engineering processes, tools and techniques.
- Broad and deep knowledge of database technologies or data management would be an advantage.
- Broad and deep knowledge of data visualisation processes, tools and techniques would be an advantage.
- Broad and deep knowledge of programming and programming languages commonly used by data scientists – including at least one of Python, R and C++.
- Experience with version control in git (using GitHub or GitLab is desirable).
- Experience with unit testing and continuous integration is desirable.
- Experience as a researcher is desirable.
- Good knowledge of computational statistics is desirable.

- Good customer relationship management skills.
- Proven ability to work as part of a team to deliver services.
- A self-motivated learner with a track record of continually updating skills – each new project is likely to require learning something new.
- Excellent organizational/project management skills.
- Good communication skills, both written and oral.
- Good broad knowledge of C&IT, including latest technology industry trends.
- Knowledge of Higher Education, Research and its environment.

Informal enquires to Andrew Edmondson, email: [a.c.edmondson@bham.ac.uk](mailto:a.c.edmondson@bham.ac.uk)

View our staff values and behaviours [here](#)

### **Valuing excellence, sustaining investment**

**We value diversity and inclusion at the University of Birmingham and welcome applications from all sections of the community and are open to discussions around all forms of flexible working.**