

# Data research developer (Archives Hub)

## Role brief

<b>Directorate</b>	Digital resources – resource discovery
<b>Base location</b>	Manchester (team base), London, Harwell, Bristol
<b>Grade</b>	C
<b>Level</b>	15
<b>Job family</b>	<i>IT software development and databases</i>
<b>Date</b>	February 2018
<b>Reports to</b>	Archives Hub service manager
<b>Responsible for</b>	Archives Hub data ingest, processing and enhancement

## 1. Background

Jisc is the UK higher, further education and skills sectors' not-for-profit organisation for digital services and solutions.

We:

- Operate **shared digital infrastructure and services**
- Negotiate **sector-wide deals** with IT vendors and commercial publishers, and
- Provide trusted **advice and practical assistance** for universities, colleges and learning providers.

Digital resources deliver a service that supports the procurement, management, discovery and use of content for UK research and education. Our work areas are: open access support, library support and analytics services, digital content, resource discovery, and further education and skills.

The Archives Hub provides a gateway to thousands of the UK's richest archives. Representing over 300 institutions across the country, the Archives Hub is an effective way for researchers to discover unique and often little-known sources. They can use the Hub to instantly scan the archival landscape and bring together diverse sources held in repositories across the country. Within the collections represented on the Hub there is a huge diversity of content, from the archives of industries, institutions and researchers to the letters and manuscripts of writers and poets. The Archives Hub team work alongside archival professionals across the country to bring these important resources to the public eye.

We have expertise in data standards for archives, and work to bring together these diverse descriptions into an effective aggregation, to save researchers time in locating relevant material. A large part of what we do involves collaborating with stakeholders and archivists, understanding users' needs, and working with technology to make sure that we maintain and develop the best possible service for end users. We also strive to create consistent data, which is interoperable, and can be used by other services, such as the Archives Portal Europe.

## 2. Purpose and scope

To work within the resource discovery section on the Archives Hub service. To provide a technical lead on data modelling, data ingest, data processing and data output, supporting large-scale data ingest from various sources and enabling effective interoperability. To provide expert guidance to help define and develop the Hub architecture

and workflow. To work to translate user requirements into technical solutions, to keep abreast with technical developments, particularly around data manipulation, and to try out new and innovative solutions to data processing and presenting the content via our website. To liaise with other Jisc services and projects and with external stakeholders in order to continually develop the service to meet users' needs.

The role will offer the opportunity to try out new technologies and explore new ideas for discovery, working in an environment that encourages collaborative working across the organisation.

### 3. Key accountabilities and role outputs

Responsibilities will be expected to be developed and finalised over time and will include but will not be restricted to:

- Technical lead in the development of the Archives Hub architecture and workflow to meet the needs of a national discovery service
- Develop the Archives Hub data model and application profile, to ensure consistency and rigour and to facilitate the development of new functionality and innovative enhancements to meet user needs
- Work with XML data, and potentially other data formats, using XSLT and other means to normalise data so that the Hub is an effective national aggregator
- Evaluate and implement options to improve scale and efficiency of data ingest to provide a comprehensive and current service
- Evaluate and work with tools designed to interrogate, manipulate or present data for projects and enhancement work
- Liaise with contributors and other stakeholders, providing technical expertise within a perspective that connects to the archival context and broader information environment
- Ensure that content ingest and other developments are technically sound and appropriate for the Archives Hub overall mandate
- Contribute to national and international activities involving data standards, interoperability, online discovery, open access and the use of new technologies in order to meet the strategic aims of the Archives Hub as a national aggregator with a focus on academic researchers, e.g. Linked Data, text mining, schema.org
- Input into internal and external reports as required, particularly with regards to the technical aspects of the service

### 4. Skills, knowledge and experience

	Essential	Desirable
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• A good honours degree or relevant experience in an equivalent role</li> </ul>	
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Experience of working in discovery/information services in a technical/data processing capacity</li> <li>• Experience of contributing to and working with specifications and standards and online services in the academic and/or cultural heritage sectors</li> </ul>	<ul style="list-style-type: none"> <li>• Experience of working as an information professional, presenting and collaborating, at a national and international level</li> </ul>

<b>Knowledge</b>	<ul style="list-style-type: none"> <li>• A good understanding of interoperability from technical, semantic and cross-domain perspectives</li> <li>• An awareness of standards and technical solutions relating to discoverability, especially within the library/archive domain, such as schema.org, Open Data and URIs</li> <li>• Knowledge of Unix to a basic level, particularly for data interrogation, and the use of version control software (Mercurial or Git)</li> <li>• Adept at use of Schematron schema language</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge of Elasticsearch, especially query API</li> <li>• Knowledge of information standards and protocols, such as Dublin Core, and how they may relate to archival discovery</li> <li>• Knowledge of archival standards and related data formats, particularly EAD, EAC-CPF and EAG</li> <li>• Knowledge of HTML and CSS, and/or experience in creating and modifying web pages</li> <li>• Knowledge of RDF and Linked Data approaches</li> <li>• Use of OAI-PMH (preferably as a harvester)</li> <li>• Use of Oxygen or other XML packages</li> </ul>
<b>Skills</b>	<ul style="list-style-type: none"> <li>• Excellent skills in data analysis and manipulation involving the use of XSLT and data manipulation tools</li> <li>• Strong verbal and written communication skills, in particular technical documentation, and production of clear documentation for the technical aspects of service delivery, appropriate to different audiences</li> <li>• Strong problem-solving skills and a strong team player.</li> </ul>	<ul style="list-style-type: none"> <li>• Presenting on technical matters to non-technical audiences</li> </ul>

## 5. Key contacts

- Executive director digital resources
- Head of resource discovery
- Archives Hub service manager
- Library and Archives services project manager
- Application developer
- Copac Hub development officer
- Library and Archival services officer

### Important additional information

The Archives Hub service manager will discuss all elements of the role brief with the appointee on appointment and after six months, recognising that some elements may need changing.

The above is provided for guidance, is not contractual, and is not an exhaustive list of all accountabilities that the post-holder may have.