The Linked Infrastructure for Networked Cultural Scholarship (LINCS) Project, College of Arts

Temporary full-time from January 1, 2020 to December 31, 2022

Hiring #: 2019-0647

Please read the Application Instructions before applying

The LINCS project is seeking a talented and versatile Technical Manager keen to innovate by promoting the accessibility, utility, and reuse of cultural data using Linked Open Data Technologies.

This position offers an exciting opportunity to make a substantial contribution to a critical infrastructure project aiming for high impact within and beyond the academy. Reporting to the Implementation Chair, Dr. Deb Stacey, as a member of the Executive Committee, the Technical Manager will manage and contribute to the implementation of this high-profile, multi-institutional cyberinfrastructure project in digital humanities, working closely with the Technical Committee, the Project Manager, and the support of the Technical Advisory Board to ensure project success with a geographically distributed team. The position involves implementing and extending open source software, and provides the opportunity to design an extensive and sustainable software architecture that will have an impact on how humanities scholars from a wide range of disciplines conduct their research, as well as creating a major data resource that makes important cultural data more accessible to the general public.

Candidates should be experienced in collaborative software development, have a keen interest in problem-solving and innovation, and a gift for communicating effectively with others to advance the development process. This is a full-time research scientist position for the duration of the 3-year grant, with the possibility of extension during the operations period if funds permit.

The LINCS Project:

The Linked Infrastructure for Networked Cultural Scholarship (LINCS) will be established through a three-year cyberinfrastructure project with major funding from the Canada Foundation for Innovation, four provinces, six Canadian universities and external partners including Libraries and Archives Canada and the Canadian Research Knowledge Network. It will initially push datasets for 50+ researchers into the Web as Linked Open Data, foregrounding difference, diversity, and the situated perspectives of the humanities from a wide range of domains.

LINCS will convert humanities datasets into an organized, interconnected, machine-processable set of resources for Canadian cultural research. It will provide context for cultural material on the web, interlink it, and ground it in its sources to produce a trusted resource for scholarly knowledge production. In the process it will extend or create the tools for doing so as a basis for further data conversion. LINCS will host this massive dataset and make it accessible through a range of interfaces.

For more information, see https://lincsproject.ca

Responsibilities:

Reporting to the Implementation Chair, Dr. Deb Stacey, as a member of the Executive Committee, the Technical Manager will provide strategic planning and technical management to this high-profile, multi-institutional...
infrastructure project in digital humanities, working closely with the Executive Team, the Project Manager, and the Technical Advisory Board to ensure project success with a geographically distributed team. Candidates should be experienced in managing collaborative software development for large research or infrastructure development projects, have familiarity with considerations related to humanities, cultural, or library data, and a gift for communicating effectively with team members and diverse stakeholders. This is a full-time research scientist position for the duration of the 3-year grant, with the possibility of extension during the operations period if funds permit.

The LINCS Technical Manager has responsibilities for managing LINCS systems and software development, including establishing a code development and management environment and protocols; setting up development, staging, testing and production systems for data conversion, storage, and dissemination on Compute Canada hardware in conjunction with their Cloud team; coordinating and managing software development across the LINCS network; and ensuring that the infrastructure is built to address the needs of researchers.

The Technical Manager will:

- Coordinate development and implementation, and manage operations of software systems and tools for the LINCS CFI Cyberinfrastructure project, applying specialized knowledge of devops.
- Provide leadership and technical management for local (University of Guelph) and remote (Victoria, Alberta, Ottawa, McGill, Toronto) technical teams (Conversion, Storage, Access), and coordinate with development partners in the US and UK), coordinating management of the implementation plan with the Project Manager;
- Oversee the set-up of systems in the Compute Canada Cloud and the running of benchmarking and testing protocols on this hardware in conjunction with Compute Canada Cloud technical team. Will continue to monitor the LINCS CC Cloud servers for the duration of the project.
- Manage technical teams using modern devops and software development methodologies such as Agile. Will hold daily morning Scrums with local personnel and teleconferencing Scrums with remote teams on a weekly basis or as needed. Will define the Sprints and keep current the Scrum board for all teams.
- Implement and monitor testing protocols and scripts for all aspects of software development and tool deployment.
- Establish, monitor, and evaluate the work of the contract/industrial personnel on all teams. Consults with industrial partners, data providers, and academic researchers to ensure that project requirements are being delivered.
- Work closely with the Project Manager to ensure that the project is on schedule and meeting requirements.
- Report to the Implementation Chair as a member of the Executive Committee and keep the Implementation Committee update on overall progress, challenges, and priorities, and liaise with the Technical Advisory Board.
- Have overall accountability for LINCS technical development, implementation, and operations; Have overall accountability for stewardship of the research data, including research data management (RDM) planning and implementation? This includes backup, metadata, testing, and security. Long-term preservation will be undertaken in partnership with RDM partners.
- May conduct subprojects and undertake initiatives as a senior member of the LINCS team, in which context they may hold project-related grants;
- Help manage natural language, semi-structured, and relational data conversion processes;
- Disseminate information about LINCS technical work within Canada and internationally, including through participation in national and international meetings;
- Contribute to long-term strategic development and planning with a view to achieving long-term sustainability.

Requirements:

- Graduate degree in a relevant field;
- Experience working on collaborative projects;
- A minimum of 5 years’ experience in a central role within one or more research, infrastructure, or software development project involving multiple stakeholders and external partners;
- Excellent oral and written communication abilities;
- Management of agile software development with a distributed team;
Technical Manager
Published on Human Resources (https://www.uoguelph.ca/hr)

Systems administration experience;
Familiarity with code versioning, issue tracking, and devops (development and operations) processes;
Grasp of the critical and ethical dimensions of data, tools, and interfaces;
Or equivalent combination of education and experience.

Highly desirable:

Technical knowledge of and experience working with semantic technologies (e.g. XML, Linked Open Data; SPARQL);
Background in the humanities, the cultural sector, or library and information science;
Experience of humanities research software development;
Experience with open-source community-based software development;
Experience with Research Data Management;
Systems administration experience;
Understanding of advanced research in the humanities and its relationship to digital infrastructure;
Record of involvement in the digital humanities community;
Personnel management experience;
Technical management experience within an academic environment;
Experience in strategic planning;
Bi- or multilingualism, especially French.

Classification               Grant/ Trust fund position, Band P07

GTP Professional/Managerial Salary Bands [3]

At the University of Guelph, fostering a culture of inclusion [4] is an institutional imperative. The University invites and encourages applications from all qualified individuals, including from groups that are traditionally underrepresented in employment, who may contribute to further diversification of our Institution.

Posting Date: 2019 11 19
Closing Date: 2019 12 16

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