Platforms EOI: Humanities Digital Research Platform

13 September 2019 at 15:24

**Project title**

Humanities Digital Research Platform

**Field of Research code(s)**

- 12 BUILT ENVIRONMENT AND DESIGN
- 13 EDUCATION
- 16 STUDIES IN HUMAN SOCIETY
- 19 STUDIES IN CREATIVE ARTS AND WRITING
- 20 LANGUAGE, COMMUNICATION AND CULTURE
- 21 HISTORY AND ARCHAEOLOGY
- 22 PHILOSOPHY AND RELIGIOUS STUDIES

**EOI Lead Name**

Nigel Ward

**EOI lead Organisation**

Queensland Cyber Infrastructure Foundation (QCIF)

**EOI lead Email**


**Collaborator details**

<table>
<thead>
<tr>
<th>Name</th>
<th>Research Group</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marco Fahmi</td>
<td>Digital Humanities and Social Sciences</td>
<td>The University of Queensland</td>
</tr>
<tr>
<td>Michael Haugh</td>
<td>School of Languages and Cultures</td>
<td>The University of Queensland</td>
</tr>
<tr>
<td>Kerry Kilner</td>
<td>School of Communication and Arts</td>
<td>The University of Queensland</td>
</tr>
<tr>
<td>John Macarthur</td>
<td>School of Architecture</td>
<td>The University of Queensland</td>
</tr>
<tr>
<td>Rachel Fensham</td>
<td>Digital Studio</td>
<td>The University of Melbourne</td>
</tr>
<tr>
<td>Nick Thieberger</td>
<td>Languages and Linguistics</td>
<td>The University of Melbourne</td>
</tr>
<tr>
<td>Hugh Craig</td>
<td>Centre for Literary and Linguistic Computing</td>
<td>The University of Newcastle</td>
</tr>
<tr>
<td>Sach Jayasinghe</td>
<td>Institute for Future Environments</td>
<td>Queensland University of Technology</td>
</tr>
<tr>
<td>Daniel Angus</td>
<td>Digital Media Research Centre</td>
<td>Queensland University of Technology</td>
</tr>
<tr>
<td>Erik Champion</td>
<td>School of Media, Creative Arts and Social Inquiry</td>
<td>Curtin University</td>
</tr>
<tr>
<td>Rachel Hendery</td>
<td>MARCS Institute</td>
<td>Western Sydney University</td>
</tr>
</tbody>
</table>
# Project description

The Humanities Digital Research Platform (HDRP) offers web-based services to uplift digital research in mature areas of the Humanities that can benefit from shared infrastructure. It will lower barriers of entry for digital researchers in key HASS disciplines which carry out digital research in text processing, accessing social media collections, visualising historical and cultural data and analysis of digital archives. Principal HDRP users conduct research in language analytics; sentiment analysis and tracking trends; and using digital methods to reconstruct the past.

HDRP will make existing standalone tools and repositories interoperate; ensuring research data collections are ready for automated processing using digital tools; clarifying terms of (re-)use of data and analytic scripts; and offering education and support services.

The objective of HDRP is to provide an integrated user experience through a Jupyter notebooks environment that provides a common resource of ready-made and modifiable workflows for humanities researchers. It will also create opportunities to shared costs of development and training across applications.

## Existing technology

### Adopt

- A cloud-based Jupyter notebook environment for supporting Digital Humanities research
- Nationally significant collection of Australian Twitter Data maintained by the Digital Observatory, QUT
- Mapping services developed by the ARC-funded Time Layered Cultural Map
- Training and education resources provided by the Language Technology and Data Analytics Laboratory at the University of Queensland
- Support and community engagement services currently provided by the HASS Data Enhanced Virtual Laboratory
- International best practice for using Linked Open Data in digital humanities research

### Adapt

- Exemplar notebooks to ensure portability and reusability across analytic platforms and disciplinary domains
- Enhance the machine-assisted system for Named Entity Recognition of placenames developed by TLCMap
- Further develop the APIs of AustLit and QldArch repositories that allow access to granular records
- Connect to collections from Trove, Australian Web Archive, PARADISEC and the prototype Language Data Commons of Australia using APIs for language analytics
- Port an ARC-funded 3D platform at Curtin University to ARDC Cloud infrastructure & add collaborative and annotation features

## Anticipated requirements

### Annual funding

$300,000 - $399,000

### Proposed length

3 years

## Other information

**Other information you wish to provide**

HDRP will coordinate and liaise with research communities submitting their EOs in Language Analytics, Digital Cultural Heritage and Social Media Analytics.

Furthermore, it will collaborate with technology-based EOs to ensure the underlying technology stack is shared across multiple disciplinary groups such as the collaboration between ecocloud and HASS DEVL to produce Tinker Studio.

These collaborations will allow sharing costs of management, maintenance and support of the platform and create sustainable pathways for continued operation by demonstrating interdisciplinary research value.