## JOB DESCRIPTION

### Vacancy Ref: A1902

<table>
<thead>
<tr>
<th>Job Title:</th>
<th>Research Associate</th>
<th>Present Grade:</th>
<th>6</th>
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<tbody>
<tr>
<td>Department/College:</td>
<td>School of Computing and Communications</td>
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<td>Directly responsible to:</td>
<td>Dr. Barry Porter</td>
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<td>Supervisory responsibility for:</td>
<td>Assisting with supervision of associated MSc and PhD students</td>
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### Other contacts

**Internal:**
- Research staff on related projects; general staff and students in research group

**External:**
- Appropriate collaborators (to be identified during the project).

### Major Duties:

1. **Undertaking and leading research necessary to achieve Lancaster University’s aims within the Leverhulme-funded project “The Emergent Self-Aware Data Centre: Autonomous software landscaping at scale”. In particular, to investigate the key goal of developing and understanding new models of computation and machine learning necessary to enable distributed computer software for data centres to be fully self-assembled and self-designed on a continuous basis.**
2. **Seek methodological innovations, empirically evaluated in realistic deployments, to support rigorously understood scientific breakthroughs contributing to the above goal.**
3. **Leading the planning, development, and publication of our work within the project, particularly in Track 1 and Track 2, and assisting the PhD student with the development of work in Track 3.**
4. **Maintaining a well-documented, open-source repository of all software artifacts developed through the project, together with a repository of repeatable experiments accompanying each publication.**
5. **Preparing and presenting of talks, posters and reports to disseminate the results of the research, and participating in national and international conferences and workshops to present the results of the project to a wider audience and to learn about current advances in the field.**
6. **Configuring and maintaining research equipment related to the project, including a cluster of Linux servers, and associated auxiliary software such as scheduling for experiments.**
7. **Participating in all project meetings, including the development of progress reports describing and reflecting on the results of the project.**
8. **Any other duties appropriate to the grade and position as directed by your line manager.**