## Job Description

**Vacancy Ref:** A3435

<table>
<thead>
<tr>
<th>Job Title: Research Associate (Developer)</th>
<th>Grade: 6</th>
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<tbody>
<tr>
<td><strong>Department/College:</strong> School of Computing and Communications</td>
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<td><strong>Directly Responsible To:</strong> Prof Joe Finney</td>
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<td><strong>Supervisory Responsibility For:</strong> N/A</td>
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**Other contacts**

**At Lancaster University:** PhD students and researchers in the project group; Staff and Students at the University; colleagues in School of Computing & Communications.

**At the Micro:bit Educational Foundation:**
Members of the Micro:bit Educational Foundation core team

**External:**
Industrial partners of the micro:bit Educational Foundation, including researchers and developers at ARM, BBC, British Council, IET and Microsoft. Members of the micro:bit global community, including partner SMEs, open source developers, enthusiasts.
**Major Activities:**

To undertake practical software research and development work necessary to achieve Lancaster University’s aims within its partnership with the Micro:bit Educational Foundation project.

More specifically:

1. To facilitate feature development and maintenance of the micro:bit C++ Device Abstraction Layer (DAL and CODAL) for micro:bit V1 and V2 to ensure continued improvement in the educational experience and capabilities for users.

2. To lead in the Software Engineering processes relating to the operational maintenance of Lancaster University’s microbit-dal and CODAL microbit-v2 open source repositories. This includes triage and addressing issues, version control and release management, pull requests, maintenance, testing and of those repositories.

3. To assist in the development of new features in microbit-dal and CODAL to unlock advanced behaviours of the micro:bit device and technologies related to the micro:bit. To follow best practices for open and agile software development.

4. To manage and create documentation required to facilitate usage of the microbit-dal and CODAL projects by third parties in order to ensure widespread adoption of these platforms.

5. To support the wider community of open-source contributors and users of the microbit-dal and CODAL repositories including Microsoft MakeCode, MicroPython and members of the micro:bit ecosystem.

6. To enable the technology transfer of micro:bit-specific parts of the microbit-dal and CODAL into the Micro:bit Educational Foundation, including direct engagement and reporting to meetings within the foundation technology team.

7. To contribute to the high profile, impact led research work of Lancaster’s Physical Computing team. To assist in the development, dissemination and impact of research and development results.

8. To work collaboratively within a team of software developers, educationalist and researchers. To engage actively in all project meetings, provide progress reports reflecting on the results of the project as required.

9. Any other duties appropriate to the grade as delegated by Prof Joe Finney, and that meet the broad expectations and requirements of the role.