

**JOB DESCRIPTION**

Embedded Systems Engineer, Psychology

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| **Job Title:** Embedded Systems Engineer | **Present Grade:** 8P |
| **Department/College:** Psychology | |
| **Directly responsible to:** Dr Richard Philpot | |
| **Supervisory responsibility for:** PEP Students (Psychology Employability Programme) | |
| **Other contacts** | |
| **Internal:** Wellcome Trust - Research Culture Project Team; Members of Psychology Department and wider Faulty and University. | |
| **External:**  Micro:bit Foundation and Microsoft Research; Representatives of the Research Funnder. | |
| **Major Duties:**  The Embedded Systems Engineer will be responsible for designing an open-source modular mobile sensing device aimed at facilitating citizen science research. This will be a versatile device that allows users to easily connect various sensors and control them using Microsoft MakeCode.   * Lead the design and development of the modular mobile sensing device. * Ensure the device allows for easy integration and control of a variety of sensors. * Embed principles of Climate and Environmental Sustainability, Inclusion of Citizen Researchers, and Digital Data Ethics into the device design. * Work as part of an interdisciplinary team, including members from the Lancaster Environmental Centre, Lancaster Institute for the Contemporary Arts, The Library, The Research Office, and the Psychology Department. * Collaborate with a web developer and two education fellows, as well as technical staff within the Psychology Department. * Maintain relationships with the Micro:bit Foundation and Microsoft Research. * Manage PEP (Psychology Employability Programme) students who will assist in testing the device and associated software. * Communicate development progress to the wider team, including senior University members and an expert advisory board. * Manage a set budget, including raising purchase requests and ensuring development stays within financial constraints. * Follow all health and safety procedures related to electronics and embedded systems engineering as outlined by the University. * Contribute to the research culture and activities of the wider research group and its interdisciplinary ethos.   As directed by the Line Manager, or their nominated representative (i.e. Dr Heather Shaw or Prof Mark Levine). | |