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| <h2>Call for contribution of expertise</h2> <p>CERN invites collaborating institutes and universities to contribute the expertise of their qualified employees to the activity described below.</p>   |   |
| <p><i>Start date:</i> 01.01.2018</p>  | <p><i>Duration:</i> One year, possible extension to a maximum of up to three years.</p> |
| <p><i>Project/Activity:</i> Development of a laboratory automation software and GUI for the reception, calibration, and debugging of high precision current measurement devices. The software will run test sequences using a Domain Specific Language (DSL), and it should seamlessly communicate through different interfaces and protocols (GPIB, RS422, 1-wire, USB, TCP/IP).</p>   |   |
| <p><i>Detailed description of Activity:</i></p> <ul style="list-style-type: none"> <li>• Evaluate the requirements for the new software: discuss with users, learn about the laboratory's hardware and software infrastructure and the different instruments to be controlled as well as the different interfaces and protocols used to communicate with them.</li> <li>• Write the requirement specification for the new software with the users and propose an implementation. The programming language used for the implementation shall be Python.</li> <li>• An important feature of the software is that it should allow the writing of scripts by the users, to implement test sequences and for data manipulation.</li> <li>• Develop, test and commission the software.</li> <li>• Document the work.</li> </ul> |   |
| <p><i>Profile:</i> Master's degree in software engineering or equivalent</p> <p><i>Specific details:</i> Very good knowledge of Python and Windows. Experience with version management systems, in particular Git. Good working knowledge of either English or French.</p>  |   |
| <p><i>Status at CERN:</i> Associated Member of the Personnel (Project Associate).</p> <p>Conditions in accordance with CERN's Staff Rules and Regulations and Administrative Circular No. 11. Subsistence allowance is payable by CERN to cover the additional cost arising from the individual's (and, as applicable, their family's) stay in the local area while performing activities at CERN.</p>  |   |
| <p><i>Option:</i> Collaborating institutes and universities can propose to support the activity of the qualified employees participating in this "Call for contribution of expertise" with students or other employees. Their status and Subsistence allowance when applicable will be adapted to their relation with their institutions</p>  |   |
| <p><i>Contact person:</i> Isabel Bejar Alonso</p>   | <p><i>Reference:</i> 2017_Q3_021_WP6_Software</p>                                       |