1. Job details
Job Title: GISA/PDMS Computing Officer
School: GeoSciences
Line Manager: PDMS/GISA Director (IT Service Manager)

2. Job purpose
Software development and maintenance for GIS Applications (GISA) software applications Photonet and SWARMS and data analysis and processing for Planning Data management Service (PDMS).

3. Main responsibilities

<table>
<thead>
<tr>
<th>% time spent</th>
<th>Description</th>
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<tbody>
<tr>
<td>35%</td>
<td>1. Provide software development and maintenance for SWARMS locust monitoring system on behalf of FAO Rome.</td>
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<tr>
<td>25%</td>
<td>2. Provide software maintenance, development and upgrades for Photonet air-photo cataloguing system, on behalf of English Heritage.</td>
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<td>15%</td>
<td>3. Develop and perform check analyses on Active Places Power web site, compare with the output from PDMS mirror database and post comparison summaries to PDMS web site.</td>
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<tr>
<td>5%</td>
<td>5. Collaborate with external organisations on research; e.g. FAO Rome</td>
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<tr>
<td>5%</td>
<td>6. Suggest and supervise dissertation projects for MSc in GIS</td>
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<td>5%</td>
<td>7. Carry out any other reasonable duties as requested by the line manager which are commensurate with the post.</td>
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4. Planning and organising
- Responsible for planning and prioritising own work on daily, weekly and long-term basis within agreed overall priorities.
- Research and development of new applications for GISA services.
- Project managing the introduction of new systems, processes and software within PDMS/GISA service over weeks or months.
- Ability to work on several projects at once within GISA/PDMS portfolio and to set appropriate priorities for delivery and deadlines.
- Respond to urgent problems, crises and service disruptions with appropriate level of priority relative to long-term goals.

5. Problem solving
- Resolve day-to-day operational difficulties using judgement and experience.
- Investigate and analyse technical problems, explore and evaluate solutions using judgement and experience to select best response.
- Identify when technical problems require input from other specialists.
- Deal appropriately with requirements of external clients.
6. Decision making
- Make autonomous decisions on work schedule and immediate prioritisation of needs.
- Decide on and implement appropriate technical solutions to software and hardware issues.
- Act to anticipate and prevent operational difficulties in provision of the service.
- Determine and take action to address own learning needs to maintain skills and expertise in new software and techniques.

7. Key contacts and communication
- Receive direction from and provide advice to GISA director.
- Work with PDMS team and GISA director to optimise use of time, skills and resources.
- Liaise with collaborators on research.
- Liaise with MSc in GIS students on dissertation projects.
- Liaise with clients on requirements, support and delivery of solutions.

8. Knowledge, skills and experience required
- Degree or equivalent qualification/experience; postgraduate qualification in GIS.
- Experience of database management using Paradox, Access or Oracle.
- 3 or more years experience of programming in Visual Basic, C, Java or Perl.
- Expert knowledge of GIS including customisation and development using ArcGIS or MapInfo.
- Knowledge of HTML and other skill to maintain web pages.
- Good written and oral communication skills

9. Dimensions
- Provides data processing and analysis services in support of research contracts with Sport England, sportscotland, Sports Council for Wales, Sports Council for Northern Ireland, TNS, Sheffield Hallam University and others with analysis required on weekly, fortnightly, monthly and ad-hoc basis.
- Member of a team of 4.

10. Job context and any other relevant information
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