University of Edinburgh

Job Description (DRAFT 2006-03-17 16:16)

1. Job Details

Job title: Computing Officer
School/Support Department: Informatics
Line manager: <Computing Unit> Manager

2. Job Purpose

To be an effective member of the team of system administrators and developers supporting all aspects of the local computing facilities

3. Main Responsibilities

Approx. % of time
1. Source and package individual third party software applications before distributing them on the School's computers using, for example, the Local Configuration (LCFG) system management system and RedHat Package management, to satisfy requests for additional software packages from staff to aid teaching and research.
2. Provide technical computing advice and solutions to user problems to enable them to do their own work more effectively using the local computing environment.
3. Write documentation on local software applications and computing services for both support staff and users to enable them to use local computing facilities more effectively in the course of their own work.
4. Log and document problems and solutions for future reference to speed up the resolution of similar problems.
5. Assist in the management and development of local computing services such as: directory services (based on LDAP), centralised user-based authentication (using Kerberos), a secure file system (using AFS), authenticated mail (SMTP AUTH), revision control system repositories (using subversion and cvs), machine configuration infrastructure (using LCFG), locally managed high speed resilient network (using switches, routers, VLANs, Spanning Tree and SNMP), School administration database (using Ingres and the locally developed TEC GUI and gurgle report generator), compute server clusters (using Beowulf architecture and associated software for job control such as GridEngine and Condor).

4. Planning and Organising

Plan and organise, over a period of a number of months, job holder's own work that has been allocated by the line manager while meeting deadlines set for the work.
Respond within a day or two to user requests for technical advice and to requests from staff for third party software that have been passed on by the Front Line support team.
Deal promptly with emergency events caused by hardware/software faults.

5. Problem Solving

Analyse fault situations and take remedial action. The faults may be caused by, for example, hardware faults, software bugs or mis-configuration of one or more components of the distributed system.
Analyse problem/fault situations reported by users that have been escalated from the Front Line support team.
Given a requirement for a piece of software, design and implement some software with those required features and behaviour.

6. Decision Making
Makes decisions about the detailed implementation of the work assigned. These decisions would normally be accepted but could be reviewed and overturned by more senior staff.
Would refer decisions over policy to senior computing management.

7. Key Contacts/Relationships
Report to line manager and/or project leader on progress of assigned work.
Participate in technical discussions with peers in area of assigned work.
Provide technical advice to users.

8. Knowledge, Skills and Experience Needed for the Job
Honours degree in Computer Science or related subject or equivalent experience.
At least three years additional relevant experience (including administration in a distributed unix environment).
Possession of good communication skills.
Ability to work accurately as a member of a team, within the framework of clear precedent and defined policies.
Experience of writing production code in a scripting language such as perl.

9. Dimensions
Computing staff centrally manage close on 1000 computer desktops and servers and control the installation of about 2800 software packages.

10. Job Context and any other relevant information
The rapidly changing knowledge base implicit in the effective support of a computing environment suitable for this leading Informatics research and teaching centre imposes on all computing officers a need for ongoing self-education within the discipline to keep skills up to date.
The multiple sites within the School put additional constraints on the planning and organisational aspects of the job and also make complex interactions between staff more time-consuming.

11. Verification
I agree that this job description conveys an accurate description of this job.

Manager:

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Job holder:

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