



ESO

European Organization
for Astronomical
Research in the
Southern Hemisphere



For its Control and Instrumentation Software Department within the Software Development Division at the Headquarters in Garching near Munich, Germany, ESO is opening the position of a

Software Engineer

Career Path: V

Purpose of the Job

The successful candidate will work on the development and maintenance of the instrumentation software that is used to control large and complex instruments operated at the ESO Observatories.

Responsibilities and Working Environment

The Software Development Division (SDD) provides software expertise and resources to all ESO projects, working in a matrix structure.

The Control and Instrument Software Department (CIS) is responsible for the development of real-time and control applications used to operate the ESO telescopes/antennas and instruments.

You will be part of the Control and Instrumentation Software Department and report to the Department Head.

Your main duties and responsibilities include:

- Design, develop and document instrument control software under Linux and VxWorks;
- Maintain a broad range of software modules from high level interfaces implemented using scripting languages to low level control software implemented in C and C++;
- Follow up and support external consortia in the development of instrument control software, as well as control and verify that the quality of the applications is according to the ESO standards;

- Participate in the integration, system testing and commissioning of the instrument at the headquarters and at the ESO Observatory in Chile;
- Assist in the extension and modernization of the VLT instrumentation framework toward the utilization of Commercial of the Shelf components (COTS); and
- Contribute to the technology evaluation and design of the E-ELT instrumentation software framework.

The position requires regular duty travels to the ESO Observatories in Chile.

Qualifications

University degree in computer science, electronic engineering, physics or equivalent.

A good command of the English language is essential.

Experience

The following skills are required:

- At least five years of experience in C/C++ programming in a UNIX/Linux environment;
- Experience in working with large distributed real-time control systems, possibly with VxWorks; and
- Proficiency in software engineering concepts and methodologies like Unified Modeling Language (UML) and SysML.

In addition the following skills would be an advantage:

- Familiarity with the control of astronomical instrumentation;
- Experience with LabView, PLC programming and OPC UA;
- Knowledge of motion control and data acquisition over Industrial Ethernet and field buses; and
- Experience with requirements management.



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Key Competences

You should be able to:

- Contribute ideas for improvements and developments to the working of the team;
- Build and manage collaborative working relationships with customers and stakeholders;
- Adjust quickly to changing circumstances and be prepared to compromise without losing sight of key objectives;
- Monitor progress of own work and deliver to agreed deadlines and standards; and
- Balance conflicting demands and respond quickly to changes in priorities in-line with agreed overall objectives.

Duty Station: Garching near Munich, Germany

Starting Date: As soon as possible.

Remuneration and Contract:

We offer an attractive remuneration package including a competitive salary (tax free), comprehensive pension scheme and medical, educational and other social benefits, as well as financial support in relocating your family, the

possibility to place your child/children in daycare up to the age of 6.

The initial contract is for a period of three years with the possibility of a fixed-term or indefinite extension based on technical and managerial achievements. The title or grade may be subject to change according to qualification and the number of years of experience.

Application: If you are interested in working in areas of frontline technology and in a stimulating international environment, please visit (<http://www.eso.org>) for further details.

Applicants are invited to apply online at <https://jobs.eso.org/>. Applications must be completed in English and should include a motivation letter and CV.

Closing date for applications is 31 July 2009.

Although recruitment preference will be given to nationals of ESO Member States (members are: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Italy, the Netherlands, Portugal, Spain, Sweden, Switzerland and United Kingdom) no nationality is in principle excluded.

The post is equally open to suitably qualified male and female applicants.