



ESO

European Organisation
for Astronomical
Research in the
Southern Hemisphere



The European Organisation for Astronomical Research in the Southern Hemisphere (ESO) is the foremost intergovernmental astronomy organisation in Europe and the world's most productive ground-based astronomical observatory. ESO carries out an ambitious programme focused on the design, construction and operation of powerful ground-based observing facilities enabling astronomers to make important scientific discoveries.

ESO operates three unique world-class observing sites in northern Chile: La Silla, Paranal and Chajnantor (home to ALMA and APEX), and the ESO Headquarters are located in Garching, near Munich, Germany.

At Paranal, ESO operates the Very Large Telescope, the world's most advanced visible-light astronomical observatory, and will host and operate the southern array of the Cherenkov Telescope Array, the world's largest and most sensitive high energy gamma-ray observatory. ESO is a major partner in ALMA, the largest astronomical project in existence. And on Cerro Armazones, ESO is building the 39-metre Extremely Large Telescope (ELT), which will become "the world's biggest eye on the sky" and whose operations will be fully integrated into the Paranal Observatory.

Due to the need for additional resources associated with the ELT programme, for its Control Software and Engineering Department (CSE), within the Directorate of Engineering (DoE) at its Headquarters in Garching, near Munich, Germany, ESO is advertising the position of a

Software Engineer

We are looking for a software engineer to join the team which is implementing control software for the ELT and its instruments. The CSE department comprises a team of almost 50 engineers organised in 5 groups and is responsible for the definition, design and implementation of complex control systems for ESO's telescopes and instruments. The main effort in CSE is spent for the ELT programme, but CSE is also supporting the other ESO programmes using a matrix organisation.

Main Duties and Responsibilities:

- Extension and maintenance of CSE's software development and test environment based on Linux and a large set of mainly open source tools
- Evaluate new (versions of) tools on their usability and usefulness and actively propose their usage
- Support the ELT test infrastructure (the so called control model and the optical test bench) consisting of servers and field electronics like PLCs
- Integration, verification and validation of control software for the ELT developed in house or external
- Potentially follow-up of software development projects contracted to external companies

Reports to:

The head of the infrastructure and integration group (CISI).

Key Competences and Experience:

Essential:

- Minimum of 3 years of experience in software development
- Knowledge of standard software development processes, preferred agile or iterative
- Experience in setting-up, preparing and maintaining SW development and test environments



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- Experience in setting up complex test infrastructure using also field electronics
- Experience in test and integration of distributed software, especially troubleshooting skills
- Knowledge of at least one programming language to an extent that errors can be identified in the code while debugging
- Experience in test automation
- Knowledge of software engineering principles and tools for configuration management, bug reporting etc.
- Experience in working in a team
- Curiosity and eagerness to learn

Desirable:

- Experience in RT Linux
- Experience in Jenkins, JIRA, SVN/Git, Docker, waf
- Experience in C/C++, Java, Python
- Experience in working with PLCs, preferably from Beckhoff and/or Siemens
- Experience in working in international/multicultural teams

Qualifications:

University degree in computer science or equivalent.

Language Skills:

Excellent command of the English language is essential; a working knowledge of German or Spanish would be an advantage.

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 help in relocating your family and the possibility to place your child/children in day care.

The contract is for a fixed term duration of three years, and is subject to successful completion of the probation period. There is a possibility of extension(s) subject to individual performance and organisational requirements, and as defined in the applicable policies and staff rules and regulations. For any further information, please visit [ESO's conditions of employment](#).

Duty Station:

Garching near Munich, Germany with regular duty trips to all ESO sites in Chile.

Career Path: V

Application:

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

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



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Deadline for applications is 27.10.2019.

Interviews are expected to start soon after this date.

No nationality is in principle excluded, however, recruitment preference will be given to nationals of Australia, Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Poland, Portugal, Spain, Sweden, Switzerland, the United Kingdom and Chile irrespective of gender, age, disability, sexual orientation, race or religion.