



GTCR05_18 SOFTWARE ENGINEER (MECHANISMS)

Deadline: June 18, 2018

The public company Gran Telescopio de Canarias, S.A. (GRANTECAN) is interested in hiring a Software Engineer for the control of mechanisms for its Development Group and invites those interested to submit their candidacy.

The required engineer must comply to the following profile:

Functions

The Engineer will join the Development Group to develop software for the control and monitoring of GTC equipment. The work to be done will be oriented on the one hand towards projects related to the new updates of the GTC and on the other to projects derived from the perfective maintenance of the GTC. Regarding the update of the GTC, the most important project, in the short term, is the new Cassegrain focal station of the telescope, where the software for the control of field rotation and acquisition and guiding mechanisms will be developed. In relation to the perfective maintenance, projects will be carried out to improve the performance of the different subsystems of the telescope such as the deformation system of the primary mirror segments or to update the control of the main axes of the telescope, etc. The tasks to be performed are, among others:

- Requirements capturing for the systems to be developed.
- Design and implementation of applications and services for the systems to be developed.
- Elaboration of unit and integration tests.
- Work in collaboration with the architecture and development teams.
- Install and configure the software and hardware required for its implementation.
- Write technical reports, manuals and support documentation.
- Provide reports on progress and problems.
- Prepare and deliver presentations in project reviews.

Section A (Essential)

Required qualification:

- University degree in computer software engineering, or related areas of second level QF-EHEA (level MECES 3).

Experience and essential skills:

- Knowledge of the use of field buses (CANOpen, Profibus, Ethercat, ...) for motor control and I/O.
- Knowledge of development under real-time environments.
- Knowledge in software design (UML).
- Knowledge of programming languages and scripting languages (C++, Java and Python) and good command of C++ templates and object-oriented programming techniques.
- Spoken and written English is required with the ability to develop the required work activity.
- Vehicle driving license (level B or higher).

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Section B (Will be assessed)

Knowledge and complementary competences:

- Spanish spoken and written, or the commitment to acquire it quickly for use in the work environment.
- PhD training (third cycle QF-EHEA, MECES 4) in areas related to the required competences.
- Previous experience in astronomical and / or scientific facilities.
- Experience in design, development, integration and testing of complex software applications that run on UNIX platforms, preferably Linux.
- Experience in the implementation of software frameworks and knowledge in pattern-based design.
- Experience in the use of software engineering tools (version control, problem reporting systems, IDE's eclipse type, UML).
- Experience in the development of "multi-threaded" applications.
- Experience in the design and development of applications for distributed software systems (CORBA).
- Experience in the realization of software projects of medium size, throughout the life cycle of the software until the successful deployment.
- Knowledge and / or experience with electromechanical machines.
- Ability to adapt quickly to changing circumstances.
- Ease to integrate in a development already very advanced.
- Good oral and written communication skills.
- Fair balance between having a general vision of the system and a practical attitude to solve the issues raised.
- Willingness to actively contribute to the continuous improvement of the development process.
- Demonstrated ability to work in a multidisciplinary team environment.

Rating scheme

- Section A: maximum score: 60 points.
- Section B: maximum score: 40 points.

Contractual Information

The selected candidate will sign with GRANTECAN, a full-time work contract for work and service, with a trial period of three months. Its estimated duration will be for a period of two to three years, depending on the duration of the work or service that originates the contract.

The workplace will be the headquarters of GRANTECAN in La Laguna (Tenerife), although depending on the characteristics and circumstances of the candidate, it can be assessed that its workplace is the GRANTECAN headquarters of Breña Baja in La Palma.

The gross salary will be between 36,463.19 and 45,159.26 euros to be agreed according to the experience and worth of the candidate. The works that are made in the Roque de los Muchachos Observatory in La Palma, will have additional compensations.

GRANTECAN is fully committed to equal treatment and opportunities in the workplace.

Submit of applications

Those interested should send before **June 18**, the employment application form (available on our website) and curriculum vitae, in PDF format, to the email address r.personal@gtc.iac.es, indicating the relevant reference number, in the subject line.

Applications submitted late, or those that do not include the mandatory application form will not be considered. In case of incomplete applications, the applicant will have a period of five (5) days, counted from the date in which the missing documentation is required.

For more information about this job, contact the Head of Development of the GTC, Mr. Javier Castro López (0034 922 315031 ext. 597 or e-mail javier.castro.lopez@gtc.iac.es). For more information about the GTC, see our website: <http://www.gtc.iac.es>.