



GRAN  
TELESCOPIO  
CANARIAS  
GTC

## **GTCR\_15\_23 OPERATIONS ENGINEER (LEVEL I-II). Digital transformation.**

Publication date: 20-07-2023

Closing date: 02-08-2023

Gran Telescopio de Canarias S.A. (GRANTECAN) invites applications for one Operations Engineer position (Level I-II) for the implementation of new observational capabilities of the Gran Telescopio de Canarias (GTC).

GRANTECAN looks for people with exceptional talent and skills to operate, maintain and improve the Gran Telescopio de Canarias (GTC) executing scientific projects of the highest quality in the field of astrophysics. To this end, it requires people with integrity, responsibility, transparency, respect and honesty in their work, who seek continuous improvement, personal safety, the integrity of the facility, efficiency and innovation in their actions, as well as responsible and sustainable use, with the primary objective of caring for the environment.

### **Duties:**

The person selected will report hierarchically to the Head of Engineering Operations. **The main function and activity of the selected person will be within the following scientific-technical service: digital transformation.** In 2021 GRANTECAN began a process of digital transformation with several innovative aspects, which aims to optimize the telescope's operational processes by increasing its efficiency and performance, thanks to digital enablers such as the Internet of Things (IoT), Artificial Intelligence, Robotics, Big Data, etc., typical of the Industry 4.0 paradigm. That includes:

- Participating in the implementation of the analytical layer (Enterprise) of GRANTECAN's Industrial IoT infrastructure.
- Participate in the development of methodologies, procedures and technology to improve the advanced maintenance of the GTC, specifically related to data science/engineering.
- Adding artificial intelligence solutions for GTC data analytics.
- Participate in the modification of systems to add a cyber-physical layer, mainly at the high level.
- Implementing dashboards based on Grafana or similar.
- Participate in the deployment of smart sensors on the GTC.

### **(Section A) Minimum qualification required:**

- First cycle university degree cycle [QF-EHEA](#) ( EQF 6) in Telecommunications, Electronics, Electrical, Software Engineering or any other related areas.
- Full current driving license (level B or higher).

### **(Section B) Experience, knowledge and specific core competencies**

- Be able to communicate effectively in Spanish.
- Be able to communicate effectively in English.
- Knowledge and experience in Industrial IoT systems.
- Knowledge in Big Data and Data Analytics.
- Knowledge and experience in telecommunication networks according to the Smart Factory paradigm.
- Knowledge of programming in C, C++ or Python.
- Knowledge and experience in cloud computing.
- Knowledge of data storage in the cloud according to new paradigms.

### **Section C (Experience and/or knowledge in specific complementary skills)**

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- MECES level 3 (Master degree in Telecommunication Engineering, Industry 4.0 or Software/Computer Systems Engineering).
- Experience in Hadoop, Spark, HDFS or similar.
- Knowledge in Artificial Intelligence Frameworks Tensorflow and/or PyTorch.
- Knowledge of Grafana.
- Experience in astrophysical facilities and/or scientific instruments.
- Ability to work in a multidisciplinary team environment.
- Leadership, organizational skills with emphasis on adapting to change, transparency, self-organisation and collaboration with the rest of the team.

**Merits to value:**

- Section A: Candidates who do not meet these requirements will be discarded and not evaluated.
- Section B: Maximum score: 60 points. Candidates who score less than 30 points will be disqualified.
- Section C: Maximum score: 40 points

The evaluation will be based on the documentation provided by the candidate and a personal interview.

GRANTECAN is fully committed to equal opportunities and non-discriminatory recruitment. Under equal conditions in terms of merit and ability, the incorporation of personnel of the sex less represented in the professional group to which the position belongs will be prioritized.

**Contractual Information**

The selected person will sign an open-ended full-time employment contract with GRANTECAN, subject to a six-month probationary period. The duration of this contract will be indefinite, starting the employment relationship on the contract's start date, with the duration linked to the scientific-technical service object of the contract detailed in the "Functions" section. From a technical point of view, it is estimated that the implementation of this scientific-technical service will be completed around 2028-2029. This is in accordance with article 23 bis of Law 14/2011, of 1 June, on Science, Technology and Innovation.

The work centre will be GRANTECAN's operations base in Breña Baja (La Palma), with frequent work stays at the Roque de Los Muchachos Observatory (GTC) at 2400 m altitude. Occasional work may be required at the Tenerife site in San Cristobal de La Laguna.

The gross salary will be that corresponding to level I (36.139,62€) or level II (40.508,36), depending on the qualifications and experience of the person selected. Additional compensation will be paid for work at the Roque de los Muchachos Observatory on La Palma.

**Non-UE citizens:**

Applicants who are not citizen of a country belonging to the European Union are invited to apply for this position, but, if selected, will be allowed to sign the contract with GRANTECAN only after obtaining the compulsory documentation required to live and work in Spain.

**Applications**

Interested applicants should send their applications by 2 August 2023 at 15:00 (WEST) to [r.personal@gtc.iac.es](mailto:r.personal@gtc.iac.es) , indicating the relevant reference number in the subject line. Applications must contain the following documents (in PDF format):

- Cover letter, describing the motivations for applying for this call.
- Application form (available on our website).
- Curriculum vitae.

**Late applications or those that do not include the required documents, will not be considered.** In case of incomplete applications, the applicant will have a period of three (3) days, starting from the date in which the missing documentation is required.

**Further information**

Further information on this position is available from the GRANTECAN Head of Operations Engineering, Luis Rodríguez García (0034 922425720 ext. 734 or e-mail [luis.rodriquez@gtc.iac.es](mailto:luis.rodriquez@gtc.iac.es)). Further information about the recruitment process is available from the GRANTECAN Head of Administration, Lourdes González Rodríguez (0034 922425720 ext. 721 or e-mail [lourdes.gonzalez@gtc.iac.es](mailto:lourdes.gonzalez@gtc.iac.es)). Further details about the GTC may be found at its web site: <http://www.gtc.iac.es>.