Vacancy details

Call for position of a Data Systems Engineer at the EMSO ERIC (European Multidisciplinary Seafloor and Water-Column Observatory European Research Infrastructure Consortium) Central Management Office (CMO)

The European Multidisciplinary Seafloor and water- column Observatory (EMSO) is a Research Infrastructure at fixed-point monitoring nodes connecting European marine research facilities: from the Arctic through North Atlantic, to the Mediterranean and the Black Sea. It currently comprises twelve open ocean facilities including three shallow water test sites (see www.emso.eu for details).

EMSO is a European Institution set up as an ERIC (European Research Infrastructure Consortium) by decision of the European Commission (September 29, 2016). Its Members are currently States from the European Union although it is open to other external members.

Application deadline: 10 July 2022 at midnight, Rome local time.

Duration: 18 months.

Estimated starting date: July 2022.

Type of contract: consulting contract or employment contract, according to Italian Laws

Required effort: 12 P/M over 18 months, corresponding to 0.6 P/M on average per month of a full time equivalent (FTE)/year.

Max. Gross remuneration: 66,000 Euro for 18 months, corresponding to an average of 5.500 Euro/month, inclusive of contributions required by Italian tax. Any additional transaction costs will be charged to the consultant except all authorized travel expenses and travel subsistence cost to be reimbursed by EMSO ERIC.

Employer: EMSO ERIC.

Location: EMSO ERIC Headquarters in Rome, Italy. Given the nature of the work to be performed, the work can be carried out remotely.

Headquarters | Via di Vigna Murata, 605 - 00143 Rome Italy - Tel. +39 06.45431040
Operative office | Via Giunio Antonio Resti, 63 | 00143 Rome Italy phone: +39 06 45431040
Fiscal Code 97908370584 - VAT Number 14062811006 - email: info@emso-eu.org - pec: eric-emso@legal.email.it - **www.emso.eu**

Job Profile:

EMSO ERIC is seeking candidates for a Data Systems Engineer position at the European Multidisciplinary Seafloor and water-column Observatory Research Infrastructure Consortium (EMSO ERIC) in Rome, Italy.

He/She will provide assistance to the CMO in the data systems architecture, and operations and maintenance of the IT infrastructure/services associated with EMSO ERIC data systems. The successful candidate will also contribute to European-funded projects.

Position responsibilities

He/She will provide IT support to different aspects of systems and software, including but not limited to design, implementation, deployment, maintenance, monitoring, and performance analysis. He/She will work closely and collaborate with other team members, and be engaged in multiple platforms and IT-related disciplines. The to be selected person will be responsible for the maintenance and evolution of the data systems managed by the CMO, including the backend of key data services such as the EMSO ERIC data portal and APIs. He/She will routinely interact with people of diverse backgrounds and nationalities from within and outside the EMSO ERIC organization, so interpersonal and communication skills are necessary.

The job allows international visibility and exposure to European and international scientific bodies in marine research in a multi-cultural and stimulating professional environment and can provide additional opportunities for the candidate professional and technical growth.

Essential Skills and Competencies:

- Bachelor's Degree in Computer or Telecommunications Engineering showing at least 8 years of relevant technical and analytical experience.
- Minimum 10 years of coding experience with IT and data systems architecture, design, deployment, automation, and operation.
- Minimum 8 years of experience with data management, data curation, and tools (NetCDF, CSV, ODV, ERDDAP, etc.).
- Experience with metadata, standard and vocabularies preferably within marine context (e.g., OceanSites, CF, NVS).
- Experience in the development of data analysis libraries, data management tools and processes for data harmonization.
- Work experience with European data repositories.
- Proven experience developing quality control tests preferably for oceanographic data (e.g., QARTOD) and qualification of data.

- Proven experience with relational databases (e.g., SQLite, PostgreSQL), and no-SQL database technologies (e.g., MongoDB, ElasticSearch, InfluxDB).
- Proven experience in designing and implementing RESTful APIs and backend data systems.
- Proven experience in different programming languages, including Java, C, and Python.
- Experience with cloud technologies and container platforms (e.g., Docker).
- Knowledge of Linux administration and networking.
- Knowledge in continuous integration/delivery/configuration management.
- Low supervision needed, takes the initiative in troubleshooting issues that arise.
- Communication and presentation skills to engage technical and non-technical audiences.
- Ability to demonstrate courtesy to team members and internal employees while maintaining a professional standard in daily work tasks.
- Fluent in written and spoken English.

Desirable Skills and Competencies

- Understanding of EMSO ERIC regional facilities and test sites.
- Knowledge of web development frameworks (e.g., development of front-end applications, with CSS, HTML, and JavaScript.)
- Experience with EU-funding programs (e.g., H2020, Horizon Europe).
- Proficiency in various major European language constitutes an advantage.
- Experience publishing scientific articles and presentations at conferences.
- Experience in delivering training activities.

Personal Attributes Desired for the Position

- Strong interpersonal abilities.
- Strong team-work skills.
- Ability to work also under pressure.
- Highly motivated, precise and rigorous.

Working Conditions:

- Duties may entail travel within and outside Europe.
- Work can be occasionally requested online during some weekends and holidays.
- Work development might occasionally fulfil deadlines with short notice.

Selection Procedure

<u>Application</u>

Applicants should send

i. a CV along with a covering letter as a single PDF document summarizing the relevant experience and expertise and motivations for wanting to join EMSO.

Applicants must declare to have a clean criminal record. <u>Interview</u>

The selected candidates will be notified and invited to participate in an individual interview to be held either in person or online. In the interview, the candidate will be asked about real IT and data examples and to carry out hands-on test exercises to assess his/her technical competence on data systems and IT associated with them.

Application Deadlines

i) Applications should be submitted by email to recruitment@emso-eu.org, addressed to the Director General of the EMSO ERIC, with the following subject heading: "Data Systems Engineer Vacancy".

ii) Any specific enquiries about this job posting should be sent to recruitment@emso-eu.org, specifying the term of the sought position.

iii) The outcome of the selection is expected to be communicated to all final-round candidates by mid-July 2022.