

#### **CAREER OPPORTUNITY**

The CSIR (Council for Scientific and Industrial Research) is a leading scientific and technology research organisation, implementing projects throughout Africa and making a difference in people's lives.

## **Senior Systems Architect/Developer**

## About the job:

With the proliferation of satellite-based and in-situ sensors, as well as information and communication technology, Earth Observation is progressing in vast strides. Developers play a key role in building systems that process diverse earth observation data to answer global change questions and deliver operational products and services. We are looking to appoint a **Senior Systems Architect/Developer** with strong developer skills within CSIR Meraka Institute, Earth Observation Science and Information Technology (EOSIT) research areas in Pretoria. (<a href="http://www.csir.co.za/meraka/eos/overview\_eos.html">http://www.csir.co.za/meraka/eos/overview\_eos.html</a>).

# **Key responsibilities:**

- Manage a team of developers building Linux-based software systems using Agile methods.
- Participate in the development of software systems at both high and low levels.
- Provide technical leadership and advice, and guide team members on various aspects of application development, including:
  - System architectures;
  - Hardware and software requirements (best tools for the job);
  - Security: Linux server security and web security; and
  - Provide management to ensure successful operation and maintenance of existing hardware and software systems, while prioritising tasks across a diverse set of projects.

## **Qualifications, skills and experience:**

- A minimum qualification of an Honours degree in computer science or engineering.
- A Master's degree in computer science or engineering would be an added advantage.
- At least seven years' experience in designing and developing Linux-based systems and applications, of which five years should include the following programming languages:
  - Python;
  - o PHP;
  - o C/C++;

- Javascript; and
- Java;
- Extensive Linux knowledge, including:
  - Server management;
  - Security;
  - Scripting (bash, Python); and
  - Databases (MySQL, Postgres).
- Broad knowledge of Linux technologies and tools.
- Broad knowledge of modern web technologies and the ability to quickly learn new technologies and frameworks.
- Experience in using version control (e.g. git, Subversion, Mercurial) and developing web-based systems.
- Solid understanding of web security best practises, such as:
  - Authentication and user management;
  - SSL: and
  - Secure coding.
- Strong understanding of hardware and software requirements for building large, scalable systems.
- Strong skills in building customer-facing systems, maintaining high availability and Object-orientated software engineering skills.
- Strong quantitative skills (mathematics / statistics / computer science).
- Advantageous experience would include spatial data / Image processing / remote sensing experience.

Should you meet the above requirements, kindly apply via <a href="https://candidate.csir.co.za">https://candidate.csir.co.za</a> and select the position reference number 304762; if you are a first time applicant, you will be required to register before you can submit your application. If you are a returning applicant, please log onto the application system using your user name and password.

### Closing date: 30 November 2014

# PLEASE NOTE THAT FEEDBACK WILL BE GIVEN TO SHORTLISTED CANDIDATES ONLY.

Should you experience any problems in submitting your application, please contact the CSIR Recruitment Centre at <u>Recruitmentqueries@csir.co.za</u>. Please <u>do not</u> submit your application to this mailbox.

The CSIR is a responsible employer; we have put measures in place to ensure that equity is implemented such that it best serves the interests of the organisation and South Africa as a whole. This speaks to the CSIR's commitment to the Employment Equity Act of 1998. By applying for this position at the CSIR, the applicant understands, consents and agrees that the CSIR may solicit a credit and criminal report from a registered credit bureau and/or SAPS (in relation to positions that require trust and honesty and/or entail the handling of cash or finances) and may also verify the applicant's educational qualifications and employment history. The CSIR reserves the right to remove the advertisement at any time before the stated closing date and it further reserves the right not to appoint if a suitable candidate is not identified.