

#### **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 Electronic Engineer**

## About the job:

The CSIR has a vacancy for a **Senior Electronic Engineer** with particular preference for embedded hardware and software development. The position is in the Sensor Science and Technology (SST) competence area within the Material Science and Manaufacturing Unit (MSM). The competence area focuses on research and development in ultrasound transducers and systems, solid-state actuation and electro optic technologies and applications. Projects are conducted across the innovation chain in order to develop ultimate solutions into the market. Such work is often conducted in collaboration with industrial clients, both local and international. This position is based in Pretoria.

### **Key responsibilities:**

- Product development;
- Embedded hardware, firmware and software architecture design;
- Develop and implement embedded hardware, firmware and software, using Altium, VHDL and C/C++;
- Embedded software development for Linux or Android and knowledge of scripting languages such as python and bash may be required from time to time;
- Perform system testing and integration;
- Clear documentation of all phases and outputs of the development;
- Inputs to project planning, costing, and proposal writing;
- Make sure that quality process are followed.

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

- A Bachelor's degree (e.g. BEng, BSc, BTech, etc.) in electronic engineering. However, a Master's degree (e.g. MEng, MSc, MTech, etc.) will be an advantage with atleast six years' relevant experience;
- Must have experience in product development and R&D processes;
- Experience with scripting languages (e.g. Python, Matlab), will be an advantage;
- Graphical image processing experience and knowledge of Altera, Quartus and Qsys is preferred;
- Must be fluent with VHDL/Verilog;
- A keen understanding of digital and analogue circuits, interfaces and standards;
- PC Programming experience in C++, Android, scripting or Java will be an advantage;

- An understanding of radiometric concepts (particularly UV and IR) and associated optics will be an advantage;
- Ability to conduct (creatively) independent research;
- Ability to work independently and within a research and development team;
- Technical leadership abilities and willingness to coach and mentor junior engineers and technicians;
- Ability to work in a multidisciplinary environment with clients, engineers, scientists, project managers and technicians;
- A track record of successful completion of electronic development projects.

Should you meet the above requirements, please email your CV to <u>jobapplications@csir.co.za</u> with your name and surname, position title and reference number on the subject line, **(e.g. John Smith: Senior Electronic Engineer : Reference No: 306969).** 

#### Closing date: 30 June 2017

# 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 as well as reserves the right not to appoint if a suitable candidate is not identified.