

STUDENTSHIP AND INTERNSHIP OPPORTUNITIES

The Council for Scientific and Industrial Research (CSIR) in South Africa is one of the leading scientific and technology research, development and implementation organisations in Africa. It undertakes directed and multidisciplinary research, technological innovation as well as industrial and scientific development to improve the quality of life of the country's people. The ICT for Earth Observation Research Group (ICT4EO) at the Meraka Institute conducts research and development in earth observation information and communications technologies that have societal benefit. ICT4EO is currently engaged in the development of Open Standards compliant services and interfaces for earth observation sensory resources in support of the South African Earth Observation Strategy.

About the vacancies: Advances in sensing technologies and distributed computing, coupled with the development of open standards that facilitate sensor and sensor network interoperability, are contributing to the emergence of a phenomenon known as the Sensor Web. ICT4EO has two MSc studentship and two internship vacancies for the research and development of ICTs for Sensor Web Enablement. Incumbents will be members of an experienced inter-institutional team directed to develop technologies for provisioning of earth observation products, services and interfaces. See http://ict4eo.meraka.csir.co.za/sites/dst_geoss/wiki/WikiStart for further details.

Studentships (2 positions) Reference number: 4914

Studentship employees will be contracted for a period of 18 months during which they will be required to successfully submit a masters thesis on a relevant and approved topic

Key responsibilities

- Learn and understand the technologies necessary to contribute to the outputs of the Sensor Web Enablement project.
- Become knowledgeable about open geospatial standards for web-enabled sensor services and products
- Develop and implement open standards compliant services and interfaces for earth observation sensory data sets and products
- Develop algorithms for provisioning services using service oriented architecture (SOA) or other protocols.
- Develop a mature understanding of the earth observation domain, including concepts of Sensor Web Enablement, Geomatics and Remote Sensing.
- Participate in team activities and contribute to the generation of technical documents and software outputs as required

Qualifications, skills and experience:

Required

- An Honours or equivalent four year degree with major in Computer Science
- No prior experience is required

Recommended

- Qualifications or demonstrable experience in Geographic Information Science and Remote Sensing
- Familiarity with open-source tools, programming libraries and operating systems
- Competence in web-centric software development

[Internships \(2 positions\) Reference number: 4913](#)

Internship employees will be contracted for a period of at least 6 months during which they will be required to develop software and contribute to the technical outputs of the project.

Key responsibilities

- Learn and understand the technologies necessary to contribute to the outputs of the Sensor Web Enablement project.
- Become knowledgeable about open geospatial standards for web-enabled sensor services and products
- Develop and implement open standards compliant services and interfaces for earth observation sensory data sets and products
- Develop algorithms for provisioning services using service oriented architecture (SOA) or other protocols.
- Develop an understanding of the earth observation domain, including concepts of Sensor Web Enablement, Geomatics and Remote Sensing.
- Participate in team activities and contribute to the generation of technical documents and software outputs as required

Qualifications, skills and experience:

Required

- A Bachelors degree with major in Computer Science
- No prior experience is required

Recommended

- Qualifications or demonstrable experience in Geographic Information Science and Remote Sensing
- Familiarity with open-source tools, programming libraries and operating systems
- Competence in web-centric software development

Should you meet the above requirements, please go to the URL indicated below in order to apply; select the position reference number 4914 or 4913; complete the application form and attach your CV:
www.csir.co.za/apply.php

Closing date: 30th March 2011

NOTE THAT FEEDBACK WILL BE GIVEN TO SHORTLISTED CANDIDATES ONLY.

Should you experience any problems in submitting your application, please contact Chez Manneson at Cmanneson@csir.co.za (012-841 4678), or Recruitmentqueries@csir.co.za. Please **do not** submit your application to this mailbox.

*The CSIR gives preference to candidates who meet the job requirements and who will add to the cultural and gender diversity of the organisation. 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 not to appoint if a suitable candidate is not identified.***