![CSIR logo - our future through science]

CAREER OPPORTUNITY

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

**Software Engineer: Modelling and Simulation based Decision Support
(Two positions)**

About the job:

The CSIR has a vacancies for **Software Engineers** in the Command, Control and Information Warfare (CCIW) competence area within the Defence, Peace, Safety and Security (DPSS) unit. This competence area focuses on the system of systems level understanding of problems and experimentation within the context of the Command, Control, Communications, Computers and Information (C4I) areas. This includes, but not limited to, modelling and simulation, information security, telecommunications, interoperability, concept development and experimentation, military technology and the integration thereof. These positions are based in Pretoria.

Key responsibilities

- Develop software in support of Command and Control (C2) and Modelling and Simulation research;
- Research modelling and simulation approaches and interoperability technology developments, and tool improvements as well as deployments of these technologies to ensure increased productivity;
- Perform modelling and simulations and functional analysis of systems and subsystems
- Develop and implement models to support system of system engagements and mission level simulations;
- Support full project and software development life cycle to ensure successful outcomes;
- Design and develop software system requirements specifications, control and interface software specifications;
- Compile reports and document on application and models;
- Ensure quality and software configuration system is up to date;
- Interact with internal and external clients to determine requirements;
- Take responsibility for assigned pieces of work;
- Communicate with relevant stakeholders (PMs, line management, senior management).

Qualifications, skills and experience

- A Bachelor's degree in computer engineering, computer science and/or other engineering disciplines with at least three years' relevant working experience in a C++ software development environment;
- An Honours degree will be advantageous;
- Knowledge and experience in the following is essential:
  - Linux and Windows Operating Systems;
  - C++ and C#; Java;

- o Object orientated design and implementation using popular methodologies and tools such as unified modelling language (UML);
  - o Porting code from Matlab to Python;
  - o Software architect, systems engineering and/or the defence industry;
- The incumbent should have:
  - o Ability to work independently in a team-context in an unstructured environment;
  - o Ability to work well under pressure and meet deadlines;
  - o Ability to prioritise and must have a sense of urgency;
  - o Take ownership of own career and development;
  - o Technically proficient and ability to stay current in own field;
  - o General programming skills;
  - o Excellent verbal and written communication;
- The ideal person must have analytical skills, be a problem-solver, enthusiastic, self-motivated and a definite self-starter.

South African citizenship and security clearance are required for this position.

Should you meet the above requirements, please email your CV to jobapplications@csir.co.za with your name and surname, position title and reference number in the subject line, **(e.g. John Smith: Software Engineer - Modelling and Simulation based decision Support: Ref No: 307943)**

Closing date: 07 April 2017

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

For more info, please contact the CSIR Recruitment Centre on **012 841 4774** or email us at Recruitmentinfo@csir.co.za