

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.

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

About the job:

The CSIR has vacancies for **Senior Software Engineers** in the Command Control and Information Warfare (CCIW) competence area within the Defence, Peace, Safety and Security (DPSS) unit. The incumbent will be involved in technology developments relating to Command and Control, Ground Based Air Defense Systems and Joint Air Defense Systems through the use of modelling and simulation, systems and software engineering experimental development as well as design and develop middleware solutions and software architectures for command & control, integration and interoperability in support of military, non-military applications. This will involve modelling and simulation, concept development and experimentation, software design, and integration of various platforms. 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 Bachelors degree computer engineering, computer science and/or other engineering disciplines with at least five years' relevant working experience in a C++ software development environment;
- A Masters degree will be advantageous;
- Knowledge and experience in the following is essential:

- Linux and Windows Operating Systems;
- C++ and C#; Java
- Object orientated design and implementation using popular methodologies and tools such as unified modelling language (UML);
- Porting code from Matlab to Python;
- Software architect, systems engineering and/or the defence industry;
- The incumbent should have:
 - Ability to work independently in a team-context in an unstructured environment;
 - Ability to work well under pressure and meet deadlines;
 - Ability to prioritise and must have a sense of urgency;
 - Take ownership of own career and development
 - Technically proficient and ability to stay current in own field.
 - General programming skills;
 - 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: Senior Software Engineer: Modelling and Simulation based decision Support No: 307945)**

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

*The CSIR is an equal opportunity employer. As such, it is committed 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.***