

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.

Doctoral Studentship: Future Wireless Networks

About the job:

The CSIR has **Doctoral Studentship** opportunities in the Future Wireless Networks research group within the Meraka Institute. The incumbents will undertake research duties and include the reporting of research outcomes at regular project seminars and in quarterly progress reports, and where appropriate, the preparation of scientific papers for publication. These opportunities are based in Pretoria.

Research topic:

Possible research areas include (but not limited to):

- 5G unique technologies for Internet of Things (IoT);
- Machine to Machine (M2M) Communications or Machine type Communications (MTCs);
- Device to Device (D2D) Communications and IoT applications;
- Network Security;
- Network Resource Management techniques for 5G/IoTs;
- Large-Scale IoT-based Cyber Physical System (CPS);
- Long Range Wireless Communications for IoT;
- Ultra-Dense Networks (UDNs).

Key responsibilities

- Prepare a research proposal to be approved by both the CSIR and the university;
- Prepare a written literature overview or assessment of the current state-of-the-art around the research topic;
- Perform original research to solve the open research problem that the student identified in his/her proposal;
- Produce sufficient quantity and quality of peer-reviewed publications around this research topic;
- Compile the Doctoral thesis and defending the work successfully;
- Contribute to extra activities that may be outside the scope of the Doctoral research as per the needs of the research group from time to time.

Qualifications, skills and experience

- A Master's degree in computer /electronic engineering, computer science;

- Ability to generate research questions and hypotheses: Review, critique and synthesize a body of research, identifying significant gaps in knowledge, methods and study subjects to develop research questions and testable hypotheses
- Effectively communicate issues, research findings and implications of research verbally and in writing to appropriate professional and public audiences.
- Enthusiastic and self-motivated individuals who take ownership and initiative and have the willingness to learn
- Ability to work well under pressure as part of a team as well as independently;
- Good knowledge of wireless networks;
- Good peer-reviewed publication record will be advantageous.

Applicants must attach the following documents:

- An abstract of research statement/philosophy (maximum 2 pager) that highlights the problem statement, research questions, research objectives and expected outputs/outcomes/impact of the research;
- Certified copies of academic results (including the latest academic results or transcript);
- Certified copies of tertiary qualifications;
- CV;

If applicable, proof of registration from university or confirmation letter from university supervisor that he/she is willing to be involved in the candidate supervision.

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: Doctoral Studentship – Future Wireless Networks: Reference No: 307911)**

Closing date: 31 May 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.***