

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.

Masters Studentship: Data Science

About the job:

The CSIR has an opportunity for a **Masters Studentships: Data Science** in the Information Security (IS) competency area within the Modelling and Digital Science (MDS) unit. The incumbent will undertake research duties including the development of data science research, the reporting of research outcomes at project seminars and the preparation of scientific papers for publication. This position is based in Pretoria.

About the unit:

The Data Science group focusses on:

- Data acquisition: creation of databases, data interpretation and security;
- Data analysis: component analysis, pattern recognition and cluster analysis;
- Feature selection and extraction: numerical, mathematical and artificial method;
- Feature Learning: adaptive learning and machine learning; and
- Decision-making: classifiers, clusters and decision trees.

For more information about the operating unit, please visit: <https://www.csir.co.za/node/2103>

Key responsibilities:

- Prepare research proposal to be approved by both the CSIR and the university.
- Prepare a written literature overview 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 a thesis and defend the work successfully;
- Contribute to extra activities that may be outside the scope of the master's research as per the needs of the research group. The amount of such work shall be limited to 20% of the total time.

Qualifications, skills and experience:

- An Honours degree in one of the subject disciplines (electrical -, electronics-, computer science, applied mathematics, and statistics);
- Proficiency in one or more computer programming languages, e.g. C++, Matlab, Python;
- All applications must be accompanied by the following documents:
 - Certified copies of academic results (including the latest academic results or transcript);

- Certified copies of tertiary qualifications and ID;
- Curriculum Vitae;
- If applicable, proof of registration from university or confirmation letter from university supervisor that he/she is willing to be involved in the candidate's supervision.

Should you meet the above requirements, please email the requested documents to jobapplications@csir.co.za with your name and surname, position title and reference number in the subject line, **(e.g. John Smith: Masters Studentship – Data Science: Reference No: 308009)**

Closing date: 19 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 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.***