

CAREER OPPORTUNITY

The Council for Scientific and Industrial Research (CSIR) is a leading scientific and technology research organisation that researches, develops, localises and diffuses technologies to accelerate socio-economic prosperity in South Africa. The organisation's work contributes to industrial development and supports a capable state.

Artificial Intelligence (AI) Engineer

About the job:

The CSIR has a vacancy for an **Artificial Intelligence Engineer** in the Emerging Digital Technologies for fourth Industrial Revolution (EDT4IR) Research Centre within the Next Generation Enterprises and Institutions Cluster. This team brings a multitude of technical expertise and collaborates to drive real-world impact. The successful candidate will be responsible for designing, developing, and implementing AI systems and solutions. This position is based in Pretoria.

For more information about the cluster, please visit https://www.csir.co.za/nextgen-enterprises-and-institutions.

Key responsibilities:

- Develop proof of concepts and prototypes for innovative AI solutions that can be successfully commercialised;
- Stay updated on the latest advancements in the ever-changing field of Al;
- Provide guidance and mentorship to junior staff in your area(s) of expertise;
- Generate and contribute towards science engineering and technology (SET) activity outputs
 e.g., reports, guidelines, system requirements, peer-reviewed publications, and technology
 and software packages;
- Gain a thorough understanding of client requirements by actively participating in user requirement analysis and developing clear and articulate proposals;
- Participate in external task teams or committees in relevant domains;

Qualifications, skills and experience:

- A Bachelor's degree in computer science/engineering, electrical/electronic engineering, information technology, or a related field is required with a minimum of three years experience in software development using Python or other programming languages, along with familiarity with software libraries such as TensorFlow, that are pertinent to AI development.
- An Honours or Master's degree will be advantageous.
- A proven track record of contributing to research and/or open-source communities
- Basic and applied machine learning, including supervised and unsupervised learning, deep learning, generative machine learning, sequence modelling, CNNs, RNNs, etc.
- Building AI models with a deep learning framework such as TensorFlow, Keras or Theano;
- Implementing and deploying theoretical machine learning algorithms from academic research papers into production systems;
- Must be capable of selecting hardware that meets the resource and performance requirements/constraints for running an ML model;
- MLOps and working with cloud-based platforms like AWS, IBM Cloud, Azure, etc., is advantageous;

- Demonstrated skills in analytical thinking, flexibility and adaptability, investigative orientation, planning and organising, problem solving, verbal and written communication, teamwork, selfmanagement (planning, prioritising and time management – includes the ability to work independently), systems level thinking, multi-disciplinary knowledge;
- All international qualifications require an evaluation report / certificate issued by the South African Qualifications Authority (SAQA).

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: Artificial Intelligence Engineer: Reference No: 313217)

Closing Date: 17 May 2024

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

For more info, please email us at Recruitmentinfo@csir.co.za. Please **do-not** send your application to this mailbox, it is only for inquiries.

The CSIR is an equal opportunity employer. As such, it is committed to the employment Equity Act and will through the filling of this vacancy, give preference to candidates from designated groups in terms of the Employment Equity Act. By applying for this position at the CSIR, the applicant understands, and agrees that the CSIR may solicit a credit and criminal report from registered credit bureau and/or South African Police Services (in relation to positions that requires trust and honesty and/or entail the handling of cash or finances), and may also verify the applicant's educational qualification 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.