**Senior Software Engineer: Digital Signal Processing (DSP)**

**Email CV to recruitment@tianaconsulting.co.za**

**For enquiries call: 011 431 1354**

**Remuneration: R 776 012 – R 1 164 018**

## About the job:

The incumbent will be responsible to design and develop software applications, tools, modules, libraries and sub-systems for use in the Integrated Radar Software Solutions Research Group. This role will play a vital part in high-impact projects from advanced land and naval surveillance radar sensors to SAR sensing systems in UAV, and spaceborne platforms. This position is based in Pretoria and will report to the Research Group Leader.

## Key responsibilities:

- Develop cutting edge real-time software;
- Push the boundaries of current technology in processing throughput;
- Be part of a team developing breakthrough radar technology in South Africa, set for deployment in the global defence market;
- Develop high-performance systems that challenge the limits of radar and system design;
- Engineer groundbreaking solutions at the heart of next-generation radar systems.

## Qualifications, skills and experience:

- A Bachelor of Engineering degree in electronic or computer engineering with at least five years' experience; OR
- A Master's degree in electronic or computer engineering with at least three years' experience;
- Experience in the following is required:
    - Digital Signal Processing;
    - C++ (preferably, otherwise C or C#), and Python;
    - Data structures, algorithms, concurrency, and code optimization;
    - GIT Version Control and CI/CD tools;
    - Linux development environments;
    - Understanding of how networks work.
- Experience in the following will be advantageous;
    - Modern C++ standards and libraries;
    - Object-oriented programming;
    - GPGPU programming (CUDA);
    - Control system development;
    - Data acquisition;
    - Radar, Communications or Electronic Warfare signal processing
    - UI/UX development (e.g. in Qt);
    - Embedded systems;

    - Production software environments;
    - End-to-end lifecycle of software development.
- High ownership and autonomy across the end-to-end lifecycle of software development.
- Ability to quickly understand and navigate complex systems and established code bases.