

POSITION AVAILABLE: Signal & Image Processing Engineer

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- *From:* "Recruiter" <debeers_jobs@xxxxxxxxxxxx>
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POSITION AVAILABLE

De Beers Group Services
Group Mining and Exploration
Differentiating Technical Services

Position: Signal & Image Processing Engineer

Located at De Beers Group Services offices, Crown Mines, Johannesburg, South Africa

Since 1888, De Beers has been involved in all facets of the diamond industry. It is the largest diamond mining company in the world and produces more than 40% of the world's diamonds. In order to remain competitive, De Beers needs to find the most efficient ways to prospect, mine and recover diamonds.

De Beers employs more than 24 000 people globally, across 6 continents in a vast array of exciting, challenging and rewarding careers. This allows for exciting current and future career opportunities within the company.

The Technology section of the De Beers Group Services is tasked with the research and development of novel technologies for the exploration,

mining and processing operations of the De Beers Group of Companies. Its X-ray and Laser Raman sorting machines form an integral part of the

diamond recovery process. The Automation and Informatics research group, in close collaboration with local and overseas university based research groups provides the signal / image processing and pattern recognition expertise for the development of new generation sorting machines, personnel scanners and other sophisticated imaging systems.

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The position involves working in multi-disciplinary teams with scientists, electronic and mechanical engineers for the research and development of novel scanning, discrimination and sorting systems.

About the Position

Working in De Beers' research and development department in Johannesburg, the job entails work on multi-disciplinary projects to generate signal/ image and pattern recognition processing solutions – i.e. algorithms, software and documentation – for specific applications

as required. This includes data acquisition, data processing and analysis, signal and image processing and reconstruction, pattern recognition and discrimination. The incumbent will also be responsible for the initiation, management and control of industry and university collaborations to ensure the effective outsourcing of both research and

development work. The sharing of knowledge with peers in order to assist with the maintenance and improvement of the signal and image processing competence.

Personal Profile

The incumbent will be required to work in a flexible, constantly changing work environment. An individual who is able to innovate and has a strong outcome focused approach, is required. The ability to work

within a team and successfully prioritise team and individual goals is necessary.

Required Technical Competencies

- Signal and Image Processing.
- Computer Vision – especially geometrical (3D reconstruction, Computer Tomography), as well as some experience in optics and hardware

aspects

- Pattern Recognition.
- Software development (analysis, design and implementation on various platforms / hardware).
- Excellent written and verbal communication skills

The following would be advantageous:

- Experience in experiment design and analysis.

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- Working knowledge of optics, vision and/or X-ray tomography hardware.
- Project management.
- Experience with supervision of university – industry collaboration.

Required Personal Competencies

- Highly self-motivated and successful at operating in a flexible, constantly changing work environment;
- Strong communication skills;
- Strong stakeholder relationship management and collaborative interpersonal style;
- High attention to detail, results oriented and innovative

Professional Requirements:

- MSc or PhD in Electronic Engineering, Computer Science, Physics or Applied Mathematics
- Sound experience with signal and image processing design and application

Closing Date for Applications: 17th March 2006

Please send your résumé to Reuben Morgan, Human Resources Shared Services-Resourcing,

Fax: +27 11 374 5458

Consideration will be given to the Company's Employment Equity

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