



Post-Doctoral Fellowship in High Performance Computing for Radio Interferometry

Purpose:

The Computer Science department at the University of Cape Town is offering a post-doctoral fellowship, funded by the National Research Foundation, as part of a new project in High Performance Computing for Radio Interferometry. This project forms part of ongoing work in preparation for the deployment of the MeerKAT radio telescope.

Eligibility and Academic Criteria:

Applications are invited from individuals of any nationality who are in possession of a relevant Doctoral Degree. Candidates should possess a strong background in Computer Science and High Performance Computing, with an emphasis on GPU/CUDA development. Candidates who have expertise in other relevant disciplines - notably image processing and visualisation, or Radio Astronomy and Interferometry in addition to parallel computing - will also be considered. A good knowledge of algorithm design as well as data structures suitable for the efficient representation of large data sets is also essential, as are good software design skills, since the algorithms developed will need to be implemented as part of production software.

Conditions:

Applicants must:

- have obtained a PhD degree within the last five years **or** provide evidence that their dissertation has been successfully examined and will be awarded by December 2012;
- not previously have held a full-time academic appointment

The successful incumbent will be required to comply with the University's approved policies, procedures and practises for the postdoctoral sector. He or she may also be required to participate in departmental activities such as limited teaching and supervision. No further benefits, such as a travel allowance, are included in the fellowship. No service will be required in return for the fellowship.

Value:

The value of the fellowship is R300 000 per annum, tax free. A indication of the cost of living in South Africa can be found at <http://hr.uct.ac.za/newstaff/costliving.php>. The fellowship is tenable for one year, with up to two years of additional funding available, subject to satisfactory progress.

Application procedure:

To apply please forward:

- a covering letter, (stating areas of expertise, research interests and experience, etc.)
- a brief (2-3 page) CV, including a full list of publications
- and contact details of two referees

to Salegga Valley on fax: +27 21 650 3551 or email: Salegga.Valley@uct.ac.za

Informal queries can be directed to Dr. Patrick Marais (patrick@cs.uct.ac.za).

Selection of eligible applicants will be made by the Head of Department of Computer Science and a sub-committee. Selection will take account of the University's approved policies and procedures.

The closing date for applications is 2 May 2012.

The University of Cape Town reserves the right to disqualify ineligible, incomplete and/or inappropriate applications,
The University of Cape Town reserves the right to change the conditions of award or to make no awards at all.