Centrum Wiskunde & Informatica (CWI) has a vacancy in the Networks & Optimization research group for a talented

**PhD student,**

on the subject of High Dimensional Geometric Algorithms.

**Job description**
We are looking for a talented and motivated student with a strong interest in any of the following subjects:

- Algorithms for lattice problems and their applications to integer programming, cryptography and wireless communications.
- High dimensional convex geometry and the geometry of numbers.
- Discrepancy minimization and its applications to approximation algorithms.
- Algorithms for linear programming, analysis of the simplex method and the geometry of polyhedra.

The student will conduct research on the subject of High Dimensional Geometric Algorithms, present the fruits of this research at top conferences and publish them in quality peer-reviewed journals of the field, culminating in a PhD thesis to be defended in public.

Please find more detailed information on my webpage.

**Requirements**
The PhD candidate is required to have a strong background in computer science and or mathematics. Candidates are expected to have an excellent command of English, and good academic writing and presentation skills. The PhD candidate will be expected to perform independent research leading to publications within top conferences and journals.

**Terms and conditions PhD Student**
The terms of employment are in accordance with the Dutch Collective Labour Agreement for Research Centres ("CAO-onderzoeksinstellingen"). The initial labour agreement will be for a period of 18 months. After a positive evaluation, the agreement will extended by 30 months. The gross monthly salary, for a PhD student on a full time basis, is €2,211 during the first year and increases to €2,834 over the four year period.

Employees are also entitled to a holiday allowance of 8% of the gross annual salary and a year-end bonus of 8.33%. CWI offers attractive working conditions, including flexible scheduling and help with housing for expat employees.

Please visit our website for more information about our terms of employment: www.cwi.nl/terms-of-employment

**Application**
Applications can be sent to apply@cwi.nl. All applications should include:

- A detailed CV including a summary of technical and scientific experiences and a synopsis of the diploma thesis. If applicable, the CV may contain detailed descriptions of previous research projects, a list of publications, and/or presentations at scientific meetings.
- A letter of motivation including research interests, reasons for applying for this position. Undergraduate level certificates including university grades and the detailed list of university courses (with grades).
- Two letters of recommendations from references who are acquainted with the applicants previous academic and/or research/professional activity.

The position is available immediately though the starting date is flexible. Applications will be accepted until the position is filled.

For residents outside the EER-area, a Toefl English language test might be required.

For more information about the vacancy, please contact Dr. Daniel Dadush, email dadush@cwi.nl.

For more information about CWI, please visit [www.cwi.nl](http://www.cwi.nl) or watch our video "A Fundamental Difference" about working at CWI.

**About Centrum Wiskunde & Informatica**
Centrum Wiskunde & Informatica (CWI) is the Dutch national research institute for mathematics and computer science and linked to the Netherlands Organisation for Scientific Research (NWO). The mission
of CWI is to conduct pioneering research in mathematics and computer science, generating new knowledge in these fields and conveying it to trade, industry, and society at large.

CWI is an internationally oriented institute, with 160 scientists from approximately 27 countries. The facilities are first-rate and include excellent IT support, career planning, training, and courses. CWI is located at Science Park Amsterdam that is presently developing into a major location of research in the natural sciences in The Netherlands, housing the sciences of the University of Amsterdam and of the Vrije Universiteit as well as several other national research institutes next to CWI.

**Research group**

For more information about the N&O research group at CWI, please visit our [website](#).