

Job opening

The Stochastics Section of the Department of Mathematics and Computer Science of the Eindhoven University of Technology invite applications for a four-year Ph.D. position in the area of Applied Probability and Stochastic Networks to begin (preferably) in Fall 2014. The starting date can be further discussed with interested applicants.

Topic

The research topic is in applied probability and stochastic networks, focusing on a class of mathematical models that are important in the performance analysis of networks, such as communication, computer, and manufacturing systems. We analyse systems with multiple interacting layers that share limited resources, where the degree of resource sharing is limited by necessity (e.g. a buffer in a computer network) or by choice (e.g. to guarantee a minimal performance level). The goal of the proposed research is to develop asymptotic and algorithmic techniques to study the performance of such layered networks. The overall aim is to make fundamental advances in the area of stochastic networks.

Candidate

Preference will be given to candidates in any branch of applied mathematics and to candidates from a different background (e.g. engineering) but with strong mathematical foundation. Research experience will be highly valued. Strong knowledge of applied probability and analysis is highly desirable.

The successful applicant will hold a Master's degree in Mathematics, Applied Mathematics, Computer Science, Engineering Sciences or related fields. All applications should include a cover letter, curriculum vitae, and transcripts. Proficiency in English is also required.

Team

The project will be carried out at the department of Mathematics and Computer Science, TU/e. M&CS has a vibrant international environment, with 46% of the scientific staff being non-Dutch nationals and more than 100 PhD candidates. It has extensive experience in helping new (foreign) employees settle in.

The research team consists of the candidate, Prof. Sem [Borst](#), Dr. Maria [Vlasiou](#), and Prof. Bert [Zwart](#). In addition, collaboration with Dr. Jiheng [Zhang](#) from the Hong Kong University of Science and Technology ([HKUST](#)) is expected and funds are provided for several visits.

Terms of employment

PhD candidates are appointed as temporary university employees for a four-year period (based on an initial one-year contract, with a three-year extension after a positive evaluation as to whether the research is expected to result in a PhD degree after four years).

The terms of employment are governed by the Collective Labour Agreement of Universities in The Netherlands, with a monthly salary starting at 2083 Euro in the first year, and increasing to 2664 Euro in the fourth year, and an additional 8% holiday allowance and 8% end-of-year bonus. An extensive fringe benefits package is included. Further details can be found [here](#). Additional budget allows for extensive research visits abroad and conference attendance.

For information regarding the university, please visit the website of [TU/e](#). [Here](#) you can find information about the sports facilities on campus. Information about Eindhoven can be found [here](#). The international office provides support with administration and housing to foreign nationals and their spouses.

Procedure and information

In order to apply, please send a detailed curriculum vitae summary and a brief cover letter motivating your interest to Dr. Maria [Vlasiou](#). Upon selection, letters of recommendation, evaluating the candidate's research experience, will be required from two or more references. Please include the contact information of at least two references in your submitted material.

For further information and inquiries, you may contact:

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