

Vacancy: scientific programmer (m/f)

The organisation

The faculty of Electrical Engineering, Mathematics and Computer Science of Delft University of Technology is known world wide for its high academic quality and social relevance of its research programs. The faculty's excellent facilities accentuate its international position in teaching and research. The faculty offers an interdisciplinary setting for its 500 employees, 350 PhD students and 1700 undergraduates. Together they work on a broad range of technical innovations in the fields of sustainable energy, telecommunications, microelectronics, embedded systems, computer and software engineering, interactive multimedia and applied mathematics.

Within the faculty, the Computer Science Department of Mediamatics focuses on media and knowledge processing. Four important application domains are telecommunications, consumer electronics, industrial automation, and life/health sciences. The department consists of three groups: Computer Graphics, Human Computer Interaction and Information and Communication Theory. The latter group focuses on processing, analysis, and interpretation of multimedia, biological and biomedical data with knowledge-based signal processing techniques, and is home to the Delft Bioinformatics group.

The Delft Bioinformatics group has a strong background in pattern recognition/machine learning, and we apply this expertise to design (predictive) models that contribute to novel biological insights. Recent examples of our contributions include the discovery of 250 novel cancer genes by analyzing and modelling insertional mutagenesis data; proposing (combinatorial) cultivation dependent transcription factor activities based on a decomposition of transcriptomics data; assessing gene therapy protocols by integrating viral insertions with gene expression data; and modelling the mechanisms that underlie chromosomal arrangement in the nucleus. This is accomplished by closely co-operating with (among others) biotechnologists at Delft University of Technology and molecular biologists at the Netherlands Cancer Institute in Amsterdam, university medical centres in Rotterdam and Leiden, and companies such as DSM and Organon.

Job description

The Delft Bioinformatics group is part of the Netherlands Bioinformatics Center (NBIC, www.nbic.nl), which coordinates bioinformatics research, tool development, service and education in the Netherlands. For the NBIC tool development and service program, we are looking for a scientific programmer that can take up a wide variety of short-term bioinformatics problems arising within the different Genomic Centers in the Netherlands (www.ngi.nl), and in particular within the Kluyver Center for Genomics of Industrial Fermentation (www.kluyvercentre.nl).

The candidate should be able to independently perform routine data analyses using existing tools, and to assist researchers in the different Genomic Centers in practical issues in the application of bioinformatics, e.g. through setting up databases, developing (web-based) applications, etc. Furthermore, (s)he should aid in the implementation, delivery and support of novel data analysis algorithms developed by researchers in the Netherlands Bioinformatics Centre. Finally, the candidate should act as an interpreter between the biologists and bioinformaticians, by signalling opportunities for the development and application of novel data analysis tools and setting up collaborations to this end.

Job requirements

The candidate should have a well-founded basis in statistics, computer science and molecular biology, have excellent programming skills and should hold a BSc or higher in Bioinformatics or Computational Biology (or Computer Science, with a strong affinity to molecular biology and genomics). The candidate should have experience with working in multidisciplinary teams. (S)he should have good communication and organization skills, have a service-oriented attitude and be an enthusiastic team player.

Conditions of employment

This is a full-time, fixed-term position for a period of four years. The starting salary, depending on age and experience, varies from scale 8 to 9 (€ 2.267-3.422 gross per month). TU Delft offers an attractive benefits package, including a flexible work week, free high-speed Internet access from home, and the option of assembling a customized compensation and benefits package (the 'IKA'). Salary and benefits are in accordance with the Collective Labour Agreement for Dutch Universities.

Application and information

For more information about this position, please contact Marcel Reinders, phone: +31 (0)15-2786424, e-mail: M.J.T.Reinders@tudelft.nl; or Dick de Ridder, phone: +31 (0)15-2785114, e-mail: D.deRidder@tudelft.nl.

To apply, please send a CV together with a letter of application and two references, before March 1, 2009 to: Dick de Ridder, Information & Communication Theory Group, Faculty of EEMCS, Delft University of Technology, Mekelweg 4, 2628 CD Delft, The Netherlands; or by e-mail to D.deRidder@tudelft.nl.