The University of Helsinki is an international scientific community of 40,000 students and researchers. It is one of the leading multidisciplinary research universities in Europe and ranks among the top 100 international universities in the world.

The Department of Computer Science (https://www.helsinki.fi/en/computer-science), which is part of the Faculty of Science, is a leading Computer Science research and teaching unit in Finland. The research themes of the Department cover machine learning and algorithms, computer networks and distributed systems, software systems and bioinformatics.

The Department of Computer Science, Faculty of Sciences, University of Helsinki invites applications for a

Postdoctoral Researcher in Algorithmic Bioinformatics

Position description

We are looking for a Postdoctoral Researcher in the area Algorithmic Bioinformatics, to join the Graph Algorithms team (https://www.helsinki.fi/en/researchgroups/algorithmic-bioinformatics/teams/graph-algorithms) lead by Associate Professor Alexandru Tomescu, which is part of the wider Algorithmic Bioinformatics group (https://www.helsinki.fi/en/researchgroups/algorithmic-bioinformatics) at the University of Helsinki.

Our research is at the intersection of practical bioinformatics, algorithm engineering and theoretical computer science, with a potential to make significant progress in all areas. Current research topics of the team include: string algorithms for pangenome graphs; *safe* string alignment solutions (i.e. base pairs appearing in *all* optimal and suboptimal alignments) and their correlation with protein function over the tree of life; genome, RNA and viral assembly from genomic sequencing data.

The tentative starting date is expected to be first months of 2021, to be negotiated.

Requirements

Applicants must hold a PhD degree in computer science, bioinformatics, or a related field. The scope of this particular position is open, but we expect it to be related to the current research topics of the group (see above). We require a strong expertise in at least one of (i) algorithmics (ii) algorithm engineering, or (iii) bioinformatics data analysis.

In case of applicants with equal qualifications, preference will be given to those with experience in developing practical Bioinformatics methods, dealing with high-throughput sequencing data, preferably based on advanced algorithms or mathematical models. Experience with algorithms for pangenome alignment and analysis is a plus.

Excellent written and oral communication skills in English are needed. You are expected to publish your findings in international scientific journals and international scientific conferences, and do short stays abroad at our collaborators. Your work will also include supervision of students and teaching duties (at most 5-10% of annual working time). You

should have a strong motivation for research in this field and possess the ability to carry out independent research.

Salary and benefits

The salary will be in accordance with the University salary system (for teaching and research personnel, level 5). The starting salary will be approximately 3400–3800 €/month, depending on previous experience and track record.

The position is full-time and initially for 2 years.

The University of Helsinki offers comprehensive services to its employees, including occupational health care and health insurance, sports facilities, and opportunities for professional development. The International Staff Services office (https://www.helsinki.fi/en/university/working-at-the-university) assists employees from abroad with their transition to work and live in Finland.

How to apply

Please submit **as a single pdf file**:

- CV with a list of publications
- Cover letter describing motivation, research interests and experience (1-2 pages)
- Contact details of two potential referees who agreed to provide letters of recommendation
- Copy of PhD degree certificate (if you have not yet obtained the PhD degree, you have to mention the expected graduation date in your cover letter)

as an e-mail to alexandru.tomescu@helsinki.fi with the subject line "Application for Postdoctoral Researcher position".

Applications will be given full consideration if received by **December 7, 2020**, with possible interviews scheduled until **December 18, 2020**. Applications received after this date will still be considered, until the position is filled.

Additional information

For more information on the position, you are welcome to contact Alexandru Tomescu (alexandru.tomescu@helsinki.fi).

For more information on the Doctoral Programme in Computer Science (DoCS), please visit https://www.helsinki.fi/en/research/doctoral-education/doctoral-schools-and-programmes/doctoral-school-in-natural-sciences/doctoral-programme-in-computer-science.

And here are some good reasons to move to Finland: http://www.stat.fi/tup/satavuotias-suomi/suomi-maailman-karjessa_en.html