KeyGene – the crop innovation company
KeyGene is the go-to AgBiotech company for higher crop yield & quality. With our intellectual capital, solution driven approach and collaborative spirit, we work for the future of global agriculture with partners in the AgriFood sector. Using our proprietary technologies and non-GM approaches, we support customers with the development of new and improved crops. Our goal is to help organizations with their toughest R&D challenges, combining our cutting edge breeding technologies, bioinformatics & data science expertise and plant-based trait platforms. At KeyGene, we work in an international environment with more than 140 professionals from all over the world. Our company is based in Wageningen, Netherlands and Rockville, MD, USA. www.keygene.com

To join the development of our population-scale pan-genomics platform, we are looking for a talented:

Postdoc Sequence Algorithms
Vacancy number 18.008

Position

With the rapidly increasing power of long read DNA sequencing technologies, the field of population genomics is undergoing a new revolution. This comes with a need to profoundly change and accelerate the way we analyze complex genomes: away from classic, reference-centric genome comparison towards high-throughput assembly, whole genome alignment and population-scale pan-genome interpretation. Current bioinformatics tools for these types of analyses poorly scale with the forthcoming data volumes from the long read sequencing technologies and have limitations in resolving the typical complexities of plant genomes. At KeyGene, and in collaboration with the Delft University of Technology and other partners from industry, we are designing and developing new algorithms and data structures that can deal with the scale-up in data generation from long read sequencing and that enable us to compare massive amounts of sequence data, rapidly and with affordable resources. To strengthen our team, we invite applications for a postdoc position to join this development. You will collaborate with other programmers and scientists, both at the premises of KeyGene in Wageningen and the Bioinformatics Lab at the Delft University of Technology.

Desired skills and experience

- PhD degree in Computer Science or related field
- Strong background in algorithm design, memory and compute optimization, and implementation
- Understanding of graph theory, algorithmics and data structure scalability
- Proficient C++ and/or Java programming
- Experience with Big Data technologies (e.g. Hadoop and Spark)
- Knowledge of biological sequence analysis, in particular sequence alignment, is not strictly required, but a strong motivation to acquire understanding of this field is essential
- Good communication skills in English

KeyGene offer

KeyGene offers a dynamic job with a competitive salary and benefits in a vibrant, highly innovative and ambitious research company. The position is available for three years. You will be able to contribute to our internationally recognized position in agro-biotech research. KeyGene is located in Wageningen (The Netherlands), a worldwide renowned centre of agricultural research. In addition, you will work and collaborate on related projects about half of the time in the stimulating environment at the Delft University Technology.

More information

Additional information can be obtained from Roeland van Ham, (rvh@keygene.com), telephone +31 317 466866. If you are interested in this position you can send your letter of application and resume to Angelique Philipsen, HR manager, e-mail: ap@keygene.com. Please mention vacancy number 18.008 in your application.

A full curriculum vitae and motivation letter should be submitted before March 15, 2018.
First round of interviews will be held on April 4 and 5, 2018