

Software developer for Big Data management platforms

About iMinds

iMinds is an independent research organization whose task, assigned by the Flemish Government, is to encourage Innovation through excellent Digital Research. Along with strategic research programs, iMinds offers companies and organizations active support in research and development and, for that purpose, stimulates companies, authorities and non-profit organizations to work together on IT research projects. iMinds also offers programs to inspire, train and coach the next generation of IT entrepreneurs. The goal of iMinds' incubation & entrepreneurship program is to bring IT innovations to the market, either by helping to build and grow successful high-tech IT ventures or by driving innovation in industry partnerships and collaborative research.

iMinds Research consists of more than 850 researchers working at the 5 Flemish universities (Ghent, Leuven, Brussels, Antwerp and Hasselt). It is an international, multidisciplinary research environment with top talent coming from more than 50 countries throughout the world.

Function description

The IBCN (Internet Based Communication Networks and Services) research group performs research in the area of next-generation intelligent distributed systems. Besides fundamental research, we are active in projects at national and European level with industrial and academic partners.

We have currently a job offer for a full-time software developer to support our novel research track on Big Data management.

Big Data management

In a world of continuously expanding amounts of data, retrieving interesting information from enormous heterogeneous data sets becomes more complex every day. Big Data computing platforms therefore need the ability to stream, analyze, store and monitor large amounts of information.

You will be active as a software developer for the Tengu platform (<http://tengu.intec.ugent.be>), built at the IBCN research group. Tengu is inspired by the Lambda architecture, which combines both real-time and offline data computing aspects and allows to integrate important data store (such as MySQL, Elasticsearch, Cassandra), processing (such as Apache Hadoop, Spark and Storm) and cloud technologies (such as OpenStack). The platform can be instantiated automatically due to the underlying configuration management (using Chef) and is accessible through a RESTful API.

Tengu is being used in many research projects, focusing on data-intensive application domains, such as abuse detection on social media sites, recommendations for and monitoring of large festival crowds, security log analysis, document management and automated real-time classification of news items.

Responsibilities

- You are responsible for solid and valid implementations of novel functionalities in the Tengu platform.
- You study the state-of-the-art in Big Data management technologies in the abovementioned application domains and provide implementations of these that are specifically adapted to the use cases in the different projects.
- You are responsible for building solid and validated proof of concepts for the different use cases.
- You communicate with the project partners and present research results to a broader community.

Profile

- You have a master degree in computer science, informatics or electrical engineering.
- You have interest in big data and cloud technologies.
- You have analytical skills, you are well-organized and are able to autonomously execute the tasks that are assigned to you.
- You have good communication skills in English. Good knowledge of the Dutch language is an asset.
- You have proven experience in software development (e.g. student projects, master thesis, work experience in software development).

Our offer

We offer a very challenging, full-time position in an inspiring, flexible and very dynamic environment. You will join a young and enthusiastic team of developers, researchers, post-docs and professors. You will receive a competitive salary.

This full-time position is available immediately. This position is primarily focused on hands-on state-of-the-art implementation and is not oriented towards a PhD. However, if during the project the interest in a PhD arises by the candidate, the opportunity can be discussed.

Procedure

Candidates should send their CV and a motivation letter to prof. Filip De Turck (filip.deturck@intec.ugent.be) and Dr. Tim Wauters (tim.wauters@intec.ugent.be). Selected candidates will be contacted for an interview (remote interview possible for international applicants). International applicants are to provide one or more reference letters.