



## RESEARCH POSITION AT ALCATEL-LUCENT BELL LABS (ANTWERP)

### Bell Labs Researcher in Computer Science / Software Engineering

#### Work environment:

Bell Labs (<http://www.bell-labs.com>), the research organization within Alcatel-Lucent, is looking for a researcher in Computer Science / Software Engineering.

Your goal as a researcher is to identify and research a wide variety of groundbreaking software technologies in the field of flexible service introduction and programming techniques. You create new intellectual property through patents, research platforms, prototypes, libraries, ... which lead to the creation of differentiating Alcatel-Lucent products. You act as prime reference in your field of expertise in close cooperation with business, academic and industrial partners.

The Flexible Service Introduction research activity is located in Antwerp (Belgium), and focuses on creating new technologies for the creation, expression, deployment, execution, and dynamic optimisation of applications characterized by an observe-analyze-decide-act loop. Scalable data processing and analysis are important aspect both in real-time (for example in the M2M data path) as in non-real time (for example in resolution workflows). These processes, which span different types of interactions (real time data streams, human interactions, slow-protocol interactions, database interactions, ...), require an extremely high flexibility both in terms of customization and adaptability to the (live) real-world context.

You will be part of a highly skilled research team of computer scientists and engineers that works closely with the Alcatel-Lucent business units on new long term technologies that have the potential to impact the company's product roadmaps.

#### Goal:

As a senior computer scientist/software engineer, you will be creating new programming techniques and dynamic optimization approaches for the abovementioned class of applications (eg programmable data processing and analysis). Driven by concrete and hard problems, you will apply state-of-the-art technology and create new technologies where the state-of-the-art fall short. You will apply SW language techniques, formal representation, knowledge representation and reasoning techniques.

Your research work will impact existing and future Alcatel-Lucent products. In addition, we are looking forward to new ideas to advance the state-of-the-art and create disruptive new products.

#### Your main responsibilities will include:

- Formulate and conduct research on the abovementioned research topics.
- Create proof-of-concept demonstrators and publish, present and convince others of your work.

We are looking for an experienced Computer Scientist / Software Engineer who:

- Is eager to join the Bell Labs research community
- Actively follows up technology trends and academic work in his/her field.
- Wants to work on concrete, hard problems, and delivers outstanding research result.
- Wants to create. Is active in prototype design & development (both conceptual and SW).

**Location:** Antwerp (Belgium)

**Technical background and experience:**

- You have a PhD degree or Master degree in Computer Science/Electrical Engineering. You have experience as a researcher in the computer science domain, including active development of demonstrators in a combined role of expert and coach. You can conduct research from conceptualisation, SW prototyping up to writing patents & publications.
- You have solid experience in one or more of the following areas: programming languages covering several methodologies (functional, imperative, declarative, logical,...), formal representation, knowledge representation, query languages, semantic frameworks, distributed systems, ...
- You have experience with building applications involving a combination of open source frameworks and libraries.
- You can express yourself fluently in English, both verbally and in writing.

**Social Skills:**

- You are a quick learner, able to identify & research new technologies
- A positive, can-do attitude.
- You combine a personal drive with commitment to team objectives
- Creative, innovative thinking skills
- Capable of working autonomously

For more information, please contact **Lieven Trappeniers** [lieven.trappeniers@alcatel-lucent.com](mailto:lieven.trappeniers@alcatel-lucent.com)