

Post-doctoral researcher on Mathematics of Machine Learning, University in Antwerp, Belgium.

Description

IMEC

imec is the world-leading research and innovation hub in nanoelectronics and digital technologies. The combination of our widely acclaimed leadership in microchip technology and profound software and ICT expertise is what makes us unique. By leveraging our world-class infrastructure and local and global ecosystem of partners across a multitude of industries, we create groundbreaking innovation in application domains such as healthcare, smart cities and mobility, logistics and manufacturing, and energy.

As a trusted partner for companies, start-ups and universities we bring together close to 3,500 brilliant minds from over 70 nationalities. Imec is headquartered in Leuven, Belgium and also has distributed R&D groups at a number of Flemish universities, in the Netherlands, Taiwan, USA, China, and offices in India and Japan. All of these particular traits make imec to be a top-class employer.

University of Antwerp – imec IDLab Research group

The Internet & Data Lab (IDLab) is an imec research group at the University of Antwerp and Ghent University. IDLab focuses its research on *internet technologies* and *data science*. IDLab is a joint research initiative between Ghent University and the University of Antwerp. Bringing together 300 internet experts, we develop technologies outperforming current solutions for communication subsystems, high speed and low power networking, distributed computing and multimedia processing, machine learning, artificial intelligence and web semantics. Within Antwerp, where you will work, the overall IDLab research areas are machine learning and wireless networking. IDLab has a unique research infrastructure used in numerous national and international collaborations.

IDLab collaborates with many universities and research centres worldwide and jointly develops advanced technologies with industry (R&D centers from international companies, Flanders' top innovating large companies and SME's, as well as numerous ambitious startups).

For further development of the IDLab machine learning cluster, we are looking for a post-doctoral researcher in the domain of scientific machine learning.

The job

- You are conducting research in the Scientific Machine learning team, analyzing and enhancing existing algorithms and creating new ones, with focus on generalization and robustness properties.
- You will manage a sub-team, coordinating publications and grant applications.
- Together with PhD students, you will implement and evaluate novel scientific machine learning algorithms, develop related computational methods and conduct experiments to compare the new algorithms with existing state-of-the-art methods
- You will coordinate research projects in this domain, in the framework of European and national research projects.

Job requirements

- You have a doctoral degree, preferably in Mathematics, Applied mathematics, Computer Science, or Physics, Engineering with strong background on numerical analysis and computation.

- You have a profound interest in machine learning algorithms and related computational methods. Expertise in manifold learning/non-linear dimensionality reduction, causality detection, and/or topological data analysis is an asset.
- You have experience with mathematical programming and related tools/software including solvers and numerical analysis/calculation, to realize numerical validation and evaluation experiments. Knowledge of nonlinear and/or stochastic programming is an asset.
- You are a team player and have strong communication skills.
- Your English is fluent, both speaking and writing.

Practical info

- Type of contract: full time
- Employment: temporary assignment for 12 months with possible further extension
- Application requirements: CV and motivation letter
- Location: Antwerp
- Candidates with an interesting profile will be contacted for an interview (skype for international candidates).
- The position will be filled as soon as possible.

How to apply

Applications should consist of

- A motivation letter
- At least one reference to contact
- Full CV
- More information about the position can also be obtained through steven.latre@uantwerpen.be.