PhD position on clinical decision support at imec-ETRO-VUB

imec-ETRO-VUB has an opening for a talented and enthusiastic PhD student to join the research group on biomedical image analysis.

About imec-ETRO-VUB
ETRO, the department of Electronics and Informatics (http://www.etrovub.be/) of the Vrije Universiteit Brussel (VUB) performs fundamental and applied research in Micro- & Optoelectronics, multidimensional signal processing, and audiovisual computing. The main research areas relevant for this position are medical image analysis, image-guided therapy, machine learning, computer-aided diagnosis and clinical decision support.

ETRO closely collaborates with UZ Brussel, a top-rated university hospital that has gained recognition at national and international level. We are a core member of imec, the world-leading research and innovation hub in nano-electronics and digital technologies. Our team is currently a fruitful mixture of people from different nationalities. The main working language is English.

The Job
The objective of this PhD is the investigation of clinical decision support tools which can be used during multidisciplinary oncology consultations. The selected candidate will develop models for predicting treatment response and patient survival based on multi-modal data (radiologic imaging, pathology, blood work, etc.) coming from a large group of patients.

The work will mainly consist in developing algorithms for medical image analysis, machine learning and data analysis, image and data visualization. In collaboration with other stakeholders, these will be integrated in tools which can be used in clinical practice for computer-aided diagnosis and clinical decision support.

The PhD is part of a large collaborative project, involving radiologists and clinicians from two university hospitals, psychologists, business developers, medical technology companies and the EORTC (http://www.eortc.org/).
Candidate profile

- Master’s degree in engineering (Biomedical Engineering, Computer Science, Applied Computer Science), Mathematics, Physics, Computer Science with excellent academic track record
- Training or experience in programming (C++ and python) is an asset
- Previous experience in (bio)medical software development and data visualization (using ITK, VTK, seaborn or bokeh) is highly appreciated.
- We are looking for an enthusiastic person, with a strong interest in the area of biomedical research and eager to learn
- Professional working proficiency of English is required

Offer

We offer a full-time PhD position in an inspiring, challenging and flexible research environment. You will join a dynamic team of developers, researchers, post-docs and professors; and collaborate with medical physicists and doctors. We offer the possibility to follow various advanced training courses in Belgium or abroad.

You will be hired at ETRO, and your main place of work will be Pleinlaan 9, 1050 Brussel (VUB campus Etterbeek), with frequent visits to the UZ Brussel (VUB campus Jette). You will receive a competitive salary or scholarship, and additional benefits covering holiday pay, hospital insurance and public transport; and generous holiday entitlement.

The position is available immediately. The PhD will be for approximately four years.

Contact

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Further information

http://www.etrovub.be/
http://www.uzbrussel.be/
http://www.imec.be