



Vrije Universiteit Brussel

Department of Electronics and Informatics (ETRO)

PhD Position on Digital Watermarking

Duration: 4 years

Starting date: as soon as the administrative steps are completed

Research Topic

Watermarking is the imperceptible embedding of information within images and video with applications ranging from security and authentication to quality control.

The main focus of the PhD lies on the further development of our watermarking algorithm that makes use of specific mathematical structures, namely 'lattices'. For this methodology, the balance between imperceptibility, robustness and the amount of embeddable information has to be investigated and fine-tuned towards two specific applications ('traitor tracing' and 'quality control').

Work environment

The Electronics and Informatics department (ETRO) (<http://www.etro.vub.ac.be>) of the Faculty of Engineering Sciences at the Vrije Universiteit Brussel (VUB) has a long-standing [expertise](#) in image and video compression, computer graphics, data transmission and data visualization. The research will be conducted within ETRO's Multimedia Forensics group (<http://mf.etro.vub.ac.be>), which is embedded within the Interdisciplinary Institute for Broadband Technology (IBBT) (<http://www.ibbt.be>).

Applicant required experience and skills

You are a civil engineer, mathematician or a computer scientist fascinated by mathematics. You are attracted by cryptography and have knowledge/experience in digital signal processing. You have excellent programming skills (Matlab/C/C++). You have good oral and written communication skills. Fluency in English is a must, given the international character of the department.

Interested?

Send your application by email to

[Prof. Dr. Ann Dooms](#)

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