

<p>Post-Doc positions in video analysis and autonomous content production. Discipline keywords: image processing, computer vision, machine learning, visual percepts classification, stochastic planning, lagrangian optimization.</p>
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Job description:

The computer vision group from the Telecommunication Laboratory of the University of Louvain-la-Neuve in Belgium (UCL) offers two Post-Doc research positions to work on the APIDIS FP7 European project - see abstract below. The project is coordinated by UCL, and will start in January 2008. One applicant should ideally start in January 2008, while the second could start after September 2008. Depending on her/his interest and background, the applicant would either focus on the video analysis or autonomous production components of the project.

More information about the APIDIS project or about the actual research strategy planned for the applicants can be obtained upon request.

APIDIS abstract:

Democratic and personalized production of multimedia content is one of the most exciting challenges that content providers will have to face in the near future. In APIDIS, we plan to address this challenge by proposing a framework to automate the collection and production of digital content.

In a typical application scenario, the APIDIS acquisition sensor network is composed of microphones and still cameras, which for example cover a basket-ball field. Both conventional and (arrays of) omnidirectional cameras are considered. Distributed analysis and interpretation of the scene is exploited to decide what to show about the event, so as to produce a video composed of a valuable subset from the streams provided by each individual camera(s).

In final, the system provides a solution to cover local events at low cost, as no technical team or cameraman is involved anymore. APIDIS also promotes the collection and supply of intelligent digital content. Intelligence refers here to the identification of salient segments within the content, and to the exploitation of that knowledge to adapt and personalize content summarization according to the individual user needs.

The potential applications of the integrated technology and methodologies that will be developed within APIDIS are numerous, ranging from personalized access to digital media related to local sport events through a web portal or a mobile hand-set; cost-effective and fully automated production of content dedicated to small-audience, e.g. souvenirs DVD, university lectures, etc; but also automated summarization for video surveillance.

Profile:

- PhD in computer science, electrical engineering, or applied mathematics;
- Excellent programming skills. Background in computer vision, video processing, machine learning, or optimization techniques are especially welcome;
- Good communications skills, both written and oral;
- Fluency in spoken and written English is mandatory. French is the spoken language in Louvain-la-Neuve, some knowledge of French is beneficial for everyday's life outside UCL.

We offer:

- A research position in a dynamic and advanced high-tech environment, working on leading-edge technologies and having many international contacts.
- A one to three-years position.
- Involvement in the guidance of young PhD students working in the same field.

Application:

Applications should include a detailed resume, a short research statement, up to 5 publications in electronic format. The names and complete addresses of referees are welcome.

Please send applications by email to:

Prof. Christophe De Vleeschouwer , devlees@tele.ucl.ac.be,

Prof. Benoît Macq, IEEE fellow, macq@tele.ucl.ac.be.