

## Function Description

### **Contract – Scientific worker Numerical Modelisation Specialist 'Assistant Researcher Digital Information' (M/W/X) Operational Direction Forensic Sciences**

#### Function

**In summary your job assignment will be:**

**To carry out scientific research within a European H2020 R&D-project concerning forensic information technology.**

More specifically, this will include:

- studying existing state-of-the-art forensic IT techniques for software based recovery and analysis of digital information
- developing new and better techniques and methods, and implementing them in new software tools
- working together with the project supervisor as well as the other partners involved in the R&D-project and its management
- communicating, synthesizing and reporting in a clear and correct way about the obtained (intermediate) results, contacts, and project meetings.
- assisting in coordinating the project (managing project timing and spending, hackathons, reporting, deliverables, etc.)
- participating to the activities of the digital information laboratory and the department of forensic sciences
- executing these and other tasks while respecting the applicable safety and security norms (procedures, methods and standards), with additional attention towards professional confidentiality rules.

#### COMPETENCES

Working for the NICC is working towards central values such as Neutrality, Integrity, Competence and Consistency (NICC). Reliable results, fluently providing services and conducting a precise administration are the logical consequences.

#### Behavioural competences:

- You are a very good communicator, both orally and in writing;
- You are an enthusiastic team player;
- You are capable of looking at situations from a non-obvious perspective;
- You are capable of constantly acquiring new insights, skills and knowledge according to the professional needs;
- You are committed to working towards your objectives, you deliver qualitative work, within the agreed deadlines;
- You analyse and evaluate information skilfully;
- You carry out decisions with a constructive critical mind;
- You are stress resistant and able to handle criticism;

- You are flexible, open to change, depending on the needs of your department and your personal development;
- You are eager to expand your scientific knowledge.

### Technical competences:

#### The following competences are absolute requirements:

- You have ample knowledge of digital multimedia- and information standards, and of IT-hardware and software;
- You are capable of testing and/or analysing existing software source code, and developing and implementing your own methods and software components;
- You have a basic knowledge of how to conduct scientific R&D tasks and projects.

#### The following competences will be considered an added value:

- You possess an excellent knowledge of the English and/or Dutch or French language (enabling you to fluently communicate with other project partners, and attending, participating to and reporting about project meetings)
- Active knowledge of the C/C++ and/or Python programming language, the design of GUIs (Graphical User Interfaces, e.g., in Qt), and the operating systems MS Windows and Linux.

## Employer

**National Institute Forensic Sciences and Criminology (NICC)**, Operational Direction Forensic Sciences, Vilvoordsesteenweg 100, 1120 Brussels, Belgium

The Operational Direction Forensic Sciences is made of 5 units whose areas of expertise and techniques are very diverse:

1. **The Ballistics and Digital Information** and the national ballistics database unit
2. The Drugs and Toxicology unit
3. The Biology unit that includes DNA, Micro-traces and Entomology analysis and research
4. The General Analytical Chemistry unit which includes 4 labs : Paints, Glass and Safety Ink Research; Fire Research and volatile components; Fibres and Textile and Gunshot Residue
5. The national DNA database unit.

**The vacancy is in the laboratory Digital Information.** In this lab research is conducted about forensic recovery software and repair of any damaged or incomplete digital data present on all types of media such as hard drives and solid state drives, USB flash drives, smartphones, etc.

In the past, the laboratory studied the recovery of meta-data in file systems (e.g., MS Windows NTFS MFT recovery), audio and video material (e.g., JPEG files and H.26x video), and has made a comparative study regarding existing forensic IT tools with regard to the completeness and accuracy of the information they retrieve. The triage and visualization of large amounts of data ("big data") is also an important area of study.

### What does the NICC do?

The NICC is a federal scientific institution of the Belgian State under the direct authority of the Minister of Justice.

The NICC, among other things, aims to serve the judicial process by making its scientific research and expertise available as a service in order to:

- detect offenders and support the collection and building of proof

- improve knowledge of criminal phenomena and the possible approach towards them.

You can find more information on the website [www.nicc.fgov.be](http://www.nicc.fgov.be).

## WORKING CONDITIONS

You will be recruited as **scientific assistant, researcher with a contract** and the corresponding salary scale SWI (at least Master level):

The minimum starting salary is **€ 2,932.64 (SW10) gross per month** (already adapted to the current index, regulatory allowances not included). The salary increases with increasing scientific and/or pecuniary seniority of the candidate.

Scientific experience useful for the function other than those described in Article 7§2, 1° and 2° of the Royal Decree establishing the status of the academic staff of the federal scientific institutions, **cannot be accounted for scientific seniority for this function.**

**The recruitment occurs in the context of an external funded research project, with a full-time contract of maximum 24 months, with the possibility of the contract being extended in the future.**

Interesting job related benefits:

- free public transports from home to work
- company restaurant
- numerous opportunities to attend trainings and for personal development
- possibility to have hospitalisation insurance at a reduced government negotiated price
- possibility of obtaining a language allowance
- benefits and discounts on offers from the Fed+ card
- possibility to obtain a bicycle allowance
- flexible schedule in a 38 hours workweek
- 26 days annual leave
- Possibility to participate to cultural and sports activities

## PARTICIPATION CONDITIONS

### Required Diploma:

You are in possession of a Master's diploma (or equivalent) in:

- Master of Science in Information Technology, Informatics or Computer Science
- Master of Science in Engineering
- Master of Science in Industrial Sciences

## HOW TO APPLY

**You can apply until the 18<sup>th</sup> of August 2016 (interview : 1<sup>st</sup> of September 2016)**

Your application will only be accepted if you send it with a **cover letter by email no later than the above** date, and:

- I. Including this information:
  - Name + Firstname
  - Full address

- Date of birth
  - National ID number
  - The complete name of the job you are applying for
  - Your motivation for the job
2. Including a full and correct Curriculum Vitae
  3. Including a copy of your diploma
  4. Including a recent (less than one month old) and original record of convictions issued by the local municipality. If the municipality cannot timely deliver this certificate, your application is accepted, subject to delivery of the certificate by the end of the selection.
  5. If interesting for the job, indicate any publications and any scientific work you have published.

**Applications can be sent by email to:**

[pando@just.fgov.be](mailto:pando@just.fgov.be) ; **your application has to be validated by an e-mail return notice.**

## CANDIDATES WITH A DISABILITY

People with disabilities are kindly asked to clearly state this in their application and to add a certificate of their disability so that we may provide the **necessary adjustments to the selection.**

## SELECTION PROCEDURE

- The selection committee decides which of the eligible candidates it considers most qualified based on the documents submitted and provided by the candidates.
- If the selection committee deems it necessary, it may ask the applicant to participate to any additional test to assess the candidate's qualifications for the job.
- The candidates that are selected will be invited to an interview with the selection committee. This interview can possibly be preceded by a written preparation. The aim of the interview is to determine the professional ability, the conformity regarding the requirements of the job, the motivation, the interest and affinity towards the job.

## HIRING CONDITIONS

If you have passed this selection, you will be required to:

- be a Belgian citizen or a citizen of a country belonging to the European Economic Area or Switzerland
- be in possession of the required diploma (and possibly equivalency certificate)
- not to be deprived of your civil and political rights
- have a behaviour which is in accordance with the requirements of the mentioned job.

## CONTACT INFORMATION

For more information, you can contact:

**Digital Information Laboratory**  
**Dr. ir. Patrick De Smet**  
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