

CONV. ID-78/2020 IDIBAPS

1. POSITION OFFERED

1.1. A job is being opened to cover **1 Position of Data Scientist** to support the research of **INSTITUT D'INVESTIGACIONS BIOMÈDIQUES AUGUST PI I SUNYER (IDIBAPS)** at the research project *"Improving the management of T1 colorectal cancer"*, Grant Agreement Number: 201932-30, funded by FUNDACIÓ LA MARATÓ DE TV3. With temporary part time contract in the following professional category:

Required qualifications and skills:

- **Required Education Level:** Degree in Telecommunications, Biomedical Engineering, Computer Vision, Data Science, Computer Science or related areas.
- **Specialty/Master:** Master on related areas will be valued, but not required.
- **Experience required:**
 - A genuine interest in machine learning, deep learning and medical imaging techniques is a must.
 - Hands on experience with deep learning, machine learning and signal/image processing.
 - Strong programming skills in Python with some experience in PyTorch, TensorFlow or Keras.
 - Experience in the backend and frontend development of a software application, RESTful APIs and software architectures based on micro services will be valued.
 - Experience or interest about NoSQL databases.
 - Experience with Git and Jira and other project management tools.
 - Rigorous work habits, a curious and critical mind, and a good sense of initiative.
 - Ability to work independently while collaborating in a team environment.
- **Required Languages:** English (Spanish and Catalan will be valued).

Job description / Tasks to be developed:

We look for a candidate that will work in a project in collaboration with artificial intelligence experts and doctors.

Colorectal cancer (CRC) is the most frequent cancer in men and women and can be prevented. The polyps are the precursor lesions of the CRC. Initially they are benign and with the years they can degenerate until turning into a cancer. The colonoscopy allows to diagnose the cancer and also to remove the polyps (polypectomy) efficiently and with few associated risks. The CRC population screening programs, invite all individuals over 50 years old to undergo a faecal blood occult test. Those with a positive test will undergo a colonoscopy in which cancer may be detected and all the polyps will be removed. The implementation of screening programs has led to a dramatic increase in the diagnosis of CRC at early stages that very often arise on a polyp that has been completely resected by polypectomy. This project aims to improve the management of early CRC. We will collect the data from more than 1400 patients with early cancer in 10 Spanish autonomous communities between 2007 and 2017.

The candidate's tasks in the project will consist of:

- Adaptation of an online labelling platform to be used by the doctors to label the CRC samples.
- Development of machine learning / deep learning models for the automatic classification / segmentation of CRC.
- Statistical analyses of the projects result – comparison between artificial intelligence and medical experts for the classification and segmentation of CRC samples.

Presentation of applications:

All documents must include the reference code of the job offer (see upper left corner of the call).

- Candidates must enclose a motivation letter (Statement of Research Interest) and their Curriculum Vitae.
- Proof of the merits exposed, and the degree obtained must also be included in the application.
- The application must include also signed authorization in reference to personal data protection law -European Regulation (UE) 2016/679- (Document attached, Page 3).

Place of submission: (clearly indicating the reference code of the job offer)

1. Delivering it personally to the Dept. of human resources, located on the Esther Koplowitz Centre, C/Rosselló 149, from 10 am to 1 pm from Monday to Friday.

2. By e-mail to the e-mail address rrhh.fundacio@clinic.cat

Application Deadline: 12/10/2020


1.2. The recruitment will be carried out according to the provisions of Article 15 of the Royal Legislative Decree 1/1995, of 24 March, which approves the text of the law of the Statute of workers, in accordance with the provisions of art. 2 of the Royal Decree 2720/98, of 18 December (BOE of 8 January 1999), law 12/2001, of 9 July (B.O.E. of 10 July) and concordant provisions.

The principle of equal treatment between men and women will be considered, according to article 14 of the Spanish Constitution, the Community Directive of 9 February 1976 and what is foreseen in the agreement of the Council of Ministers of 4 March 2005, which approves the plan for gender equality in the General Administration of the State. The universal accessibility for disabled persons will be considered according to the second paragraph of Article 1 of the law of December 2 51/2003 of equality of opportunities; 5% of the vacancies are preserved when candidates' pass the selection process and disabilities are proved. Also, compatibility with the tasks associated to the job must be proved so that progressively we reach 2% of all workforces.

1.3. Annual gross remuneration inherent to the job offer object of this call will be fixed on the basis of the experience provided and the skills of the candidates.

1.4. In accordance with Regulation (EU) 2016/679 of 27 April 2016 on the protection of natural persons with regard to the processing of personal data (hereinafter the "Regulation"), we hereby inform you that:

- The party responsible for processing your data is the Institut d'Investigacions Biomèdiques August Pi i Sunyer (hereinafter "IDIBAS"), with Corporate ID No. Q5856414G, and registered address in Barcelona, Carrer Rosselló 149-153. You may contact the Data Protection Manager by sending an email to protecciodades.recerca@clinic.cat or by writing to the Legal Director at Carrer Rosselló 149-153, Barcelona.
- When presenting your candidacy or sending us your CV, your data must be communicated with the aim and purpose of allowing employees at the entity to carry out management and selection processes.
- The information will be used by administrative and employee services in our entity, for their corresponding services, and may be submitted in full or in part to any authorities that, for legal reasons, require this type of information.
- The data provided will be held for a period of 1 year, and in addition once the relationship has been completed the data will be held for the period necessary to comply with legal provisions.
- The data provided may be transferred to a third country or international organisation, where necessary to justify the contract and/or salary of the employee providing the data.
- You have the right to access your data, request rectification of inaccurate data or request the removal of your data. Equally, you have the right to restrict the processing of your data, and you may oppose or withdraw consent for your data to be used in certain circumstances. You may exercise these rights by writing to the Legal Director at Carrer Rosselló 149-153, Barcelona, or by sending an email to protecciodades.recerca@clinic.cat. We also inform you of your right to file a complaint with the Catalan Data Protection Authority (Autoritat Catalana de Protecció de Dades) for any action taken by IDIBAPS that you believe infringes your rights.



Barcelona a 23/09/2020
Marta Fernandez Cufí
Human Resources Manager

I Authorize at:

INSTITUT D'INVESTIGACIONS BIOMÈDIQUES AUGUST PI I SUNYER (IDIBAPS) to treat my personal data for the personnel selection procedure, which will cede it only in these legally enforceable cases, in accordance with the provisions of European Regulation (UE) 2016/679, and corresponding regulations that develop it.

Name:

Signed:

Barcelona,