

# Ignacio Masari

## WORK EXPERIENCE

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[ 31/10/2021 - Current ] **PhD Student**

*Università degli Studi di Genova*

**City:** Genova

**Country:** Italy

**Main activities and responsibilities:**

PhD Student on remote sensing at DITEN

[ 31/01/2021 - 28/10/2021 ] **University research support**

*Ghent University*

**City:** Gent

**Country:** Belgium

**Main activities and responsibilities:**

Image analyst in the Plant System Biology (psb.ugent.be) center.

[ 01/2020 - 07/2020 ] **Image processing intern**

*Hôpital Européen Georges Pompidou*

**City:** Paris

**Country:** France

**Main activities and responsibilities:**

C# and MATLAB programming

Biomedical images analysis

Results analysis

Main research topic:

- Diastolic function indices obtained through MRI4D Flow images

[ 02/2017 - 06/2019 ] **Junior researcher**

*Facultad de Ingeniería y Ciencias Exactas y Naturales, Universidad Favaloro*

**City:** Buenos Aires

**Country:** Argentina

**Main activities and responsibilities:**

C# and MATLAB programming

Biomedical Image Analysis

Data Analysis

Main research topics:

- Tricuspid annulus dilatation analysis through 4DCT images.
- ISMAD
- FFRct

[ 02/2022 – Current ] **University teaching assistant - Machine Learning and Pattern Recognition**

*DITEN, Università degli studi di Genova*

**City:** Genova

**Country:** Italy

**Main activities and responsibilities:**

Preparing instructional material and tutorial for the configuration of the software environment to be used during the exercises (Anaconda).

Didactical support for several laboratories covering basic machine learning topics applied to remotely sensed data

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## EDUCATION AND TRAINING

[ 03/09/2019 – 03/09/2020 ] **Biomedical Engineering Master Degree (BioImaging track)**

*Université de Paris, ENSAM and PSL in collaboration with Telecom ParisTech*

**Address:** Paris, France

**Level in EQF:** EQF level 7

**Main subject / occupational skills covered:**

Last provisional transcript:

- GPA: 15.44/20
- Rank: 3/22

[ 01/2014 – 06/2019 ] **Biomedical Engineering Degree**

*Facultad de Ingeniería y Ciencias Exactas y Naturales, Universidad Favaloro*

**Address:** Ciudad Autónoma de Buenos Aires, Argentina

**Level in EQF:** EQF level 7

**Main subject / occupational skills covered:**

- GPA: 8.04/10
- Degree with honours

[ 08/2020 – 11/2020 ] **Deep Learning Specialization**

*DeepLearning.AI*     <https://www.deeplearning.ai/program/deep-learning-specialization/>

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## LANGUAGE SKILLS

**Mother tongue(s):** Spanish

**Other language(s):**

### English

**LISTENING C2 READING C2 WRITING C2**

**SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2**

### French

**LISTENING B2 READING B2 WRITING B1**

**SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2**

### Italian

**LISTENING C2 READING C1 WRITING C1**

**SPOKEN PRODUCTION C1 SPOKEN INTERACTION C2**

## DIGITAL SKILLS

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### My Digital Skills

#### Programming skills

C C++ C# | Python | Javascript | R | Matlab | OpenGL | OpenCV | SQL

#### Image Processing

ImageJ | Fiji | Icy | ENVI | GIS

#### Deep Learning

Scikit-learn | Tensorflow | Keras Framework | Pytorch

## PUBLICATIONS

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[ 2022 ]

### **Morphological and Dynamic Analysis of the Right Atrioventricular Junction in Healthy Subjects with 4D Computed Tomography**

<https://doi.org/10.1007/s13239-021-00604-0>

*J. Jouan, D. Craiem, I. Masari, V. Blich, G. Soulat, E. Mousseaux*

Cardiovascular Engineering and Technology. Feb, 2022. <https://doi.org/10.1007/s13239-021-00604-0>

[ 2020 ]

### **Dynamics of the right atrio-ventricular junction in human: a spatial high-resolution study with multiphase computed tomography**

<https://doi.org/10.1093/ehjci/ehaa946.0169>

*J. Jouan, I. Masari, V. Blich, G. Soulat, D. Craiem, E. Mousseaux*

European Heart Journal, Volume 41(Supplement\_2), p. 169. Nov, 2020.

[ 2020 ]

**High-resolution analysis with multiphase computed tomography of the left atrio-ventricular junction in mitral annular disjunction**

<https://doi.org/10.1093/ehjci/ehaa946.0170>

*J. Jouan, I. Masari, V. Blich, G. Soulat, D. Craiem, E. Mousseaux*

European Heart Journal, Volume 41(Supplement\_2), p. 170. Nov, 2020.

[ 2019 ]

**Four-dimensional Computed Tomography Study of the Tricuspid Annulus Deformation During the Cardiac Cycle**

*I. Masari, J. Jouan, A. Pascaner, M. Casciaro, D. Craiem*

Bioengineering Argentinian Society Journal, Vol 23 No 2. Nov, 2019.

## CONFERENCES AND SEMINARS

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### Seminars

#### **GMEPE/PAHCE 2019**

Participated in the organizing committee at the GMEPE/PAHCE 2019 Conference.

Ciudad Autónoma de Buenos Aires, Argentina. March 26-31, 2019.

#### **IMETTYB (CONICET) internal seminars**

"Evaluation of cardiovascular hemodynamics using MRI: left ventricular diastolic function and association between non-invasive aortic wall shear stress and medial wall histopathology", 28/08/2018.

"Rigidez de la aorta mediante Resonancia Magnética 4D", 26/06/2018.

"Exosomas derivados de células madre mesenquimales de cordón umbilical humano activadas a un fenotipo anti-inflamatorio/inmunosupresor para regeneración cardiaca en un modelo ovino de infarto agudo de miocardio", 05/06/2018.

#### **ARGENCON 2016**

Voluntary collaborator at the IEEE ARGENCON 2016, IEEE Argentina's biennial congress.

Ciudad Autónoma de Buenos Aires, Argentina. June 15-17 2016.

## HONOURS AND AWARDS

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### Honours and awards

#### **International Masters Mobility Scholarship (MIEM) 2019-2020 as a part of the Initiative of Excellence (IdEx).**

The IdEx is a program of investments for top higher education and research facilities in France.

MIEM is a competitive program that aims to promote the internationalization of master's programs and facilitate the arrival of the best international students in order to create a pool of excellence for the recruitment of future doctoral students.

#### **2nd place in the Argentinian Informatics Olympics(OIA) 2012.**

The OIA is a two rounded informatics competition. First round consists on pre-selection regional competitions. Second round is a national competition. In 2012, in the national round there were 22 participants in my category, where I achieved the 2nd place.

## **SCIENTIFIC DISSEMINATION**

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### **Scientific Dissemination**

#### **FICEN Science Fair**

Facultad de Ingeniería y Ciencias Exactas y Naturales. Universidad Favaloro. Ciudad Autonoma de Buenos Aires, Argentina. Nov, 2017.

#### **Four-dimensional Computed Tomography Study of the Tricuspid Annulus Deformation During the Cardiac Cycle**

XXI Bioengineering Argentinian Society Congress. Córdoba, Córdoba, Argentina. Oct, 2017.

#### **Feria del Libro**

University Favaloro's stand. Scientific dissemination for the general public. Ciudad Autonoma de Buenos Aires, Argentina. April, 2018.