

# João P C Bertoldo

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## EDUCATION

MSc in Artificial Intelligence, Systems, Data (IASD) (a) 2019 – 2020

**in** joaopcbertoldo

Paris-Dauphine - PSL University

Paris, France

April, 2021

• joaopcbertoldo

Subjects: Machine Learning, Deep Learning, Optimization, Image Analysis.

MSc in Executive Engineering (b) | Minor: Data Science

2017 – 2020 Paris, France

Subjects: Software Engineering, Databases, Probability, Statistics, Operations Research.

Mechatronics Engineer (5-year degree) (c)

2013 - 2020

University of São Paulo (USP)

São Carlos, Brazil

Obtained a 1-year scholarship for an international exchange at the University of Valenciennes (France).

Teaching assistant (6 mos.): conducted workshops on numerical analysis using MATLAB.

#### WORK EXPERIENCE

Research Intern (6 mos.) / Research Engineer (since Mar. 2021) (d)

since Sep. 2020 (6 mos.)

Évry (Parisian region), France

Working on 2D/3D X-ray tomography segmentation with U-Nets [unet, unet3d].

Talked at a seminar at , the Journée ISS France, and the week-course CVML 2021.

Research & Development Intern (e)

2020 (5 mos.)

Mindsay

Paris, France

Evaluated explainability methods [lime, anchors, shap] on layperson-maintained NLP models (classification task).

Data Scientist Intern (f)

2019 (7 mos.)

Datadog

New York, USA

Analyzed and developed algorithms for time series, tag analysis, and a knowledge graph.

Software Engineer Intern (g)

2018 – 2019 (8 mos.)

Kelda Drilling Controls

Porsgrunn, Norway

Modeled and designed a time series annotation tool for supervised machine learning.

Back-end Developer/Data Scientist Intern

2017 – 2018 (3 mos./2 mos.)

Stone Co.

Rio de Janeiro, Brazil

#### **PROJECTS**

tomo2seg (??) Tomography segmentation with deep learning (since Sep. 2020) [tomotoseg].

**pymdr (??)** Implementation of **liuMiningDataRecords2003** [**liuMiningDataRecords2003**] in Python (1 mo.) [**pymdr**].

**Sunlight simulator (??)** Head of the project; developed a 3D motion simulator in Python (9 mos.) [sunlight].

**Smart coffee machine (??)** Developed a web server in .NET (C#) and an Arduino controller (C++) (4 mos.) [smartCoffee].

## SKILLS & PERSONAL INTERESTS

English (C1): fluent, worked in English speaking companies for 1 year, obtained TOEFL 117/120 (2020).

French (C2): fluent, read subjects in French for 3 years, worked in French organizations for 1 year.

Portuguese: native.

### Programming:

Python (??-??) (NumPy, SciPy, Matplotlib, Pandas), MATLAB (??), Java (??), JavaScript (React, Redux) (??).

Databases MongoDB (??), InfluxDB (??), PostgresSQL (??).

Deep learning TensorFlow (??), Keras (??).

**Prototyping** Streamlit (??), Jupyter Lab (??-??), Jupyter Notebook (??-??).

Others ImageJ (??), Avizo (??), GitLab (??), Git (??-??), Bash (??-??), Docker (??).

Writing and content creation: Google Suite, LaTex, Markdown.

Personal interests: skydiving, podcasts (especially about politics), has been in 18 countries.