

### Personal Information

Name **José Pedro Ribeiro Ferreira Pinto.**  
Born on **20/7/1998.**

### Professional experience

- Nov. 2020 – **Data scientist, INESC TEC, Porto, Portugal.**  
Now Collaboration with Efacec on the project *transformer4.0*. Development of machine learning solutions for power transformer problems. Created a subset selection approach leading to significant lifecycle cost savings and reduced environmental impact. Deployed a cluster computing communication framework for IOT sensor data and distributed machine learning. Developed a synthetic data generation system to tackle shortcomings in data quantity and quality availability. Divulged results in the form of published scientific articles and company wide meetings.
- Jul. 2020 – **Data engineer (Internship), INESC TEC, Porto, Portugal.**  
Set. 2020 Development of a solution for classification of LIDAR point clouds. Successfully developed and deployed a point cloud data generation and optimization approach, a wide array of deep learning computer vision models and automated hyperparameter optimization tools
- Jul. 2019 – **Software engineer (Internship), Health Data Pioneers GmbH, Munich, Germany.**  
Set. 2019 Development of a web application for form creation with a drag-and-drop interface for the company's flagship software. Successfully delivered an MVP in 3 weeks, with the remaining time being spent on iterative feature improvement and addition.

### Education

- 2019–2021 **Masters in Data Science, Faculty of Sciences of the University of Porto (FCUP), Porto, Portugal, Final grade average: 18/20; Thesis: 19/20.**  
Thesis: Identification of Viable Dissolved Gas Analysis Subsets for Power Transformers.
- 2016–2019 **Bachelors in Computer Science, Faculty of Sciences of the University of Porto (FCUP), Porto, Portugal, Final grade average of 16/20.**

### Computer Knowledge

#### Programming languages and markup

Python, R, C, Java, Javascript, AMPL, Prolog, HTML, CSS and  $\text{\LaTeX}$

#### Data science and Databases

Tensorflow/Keras, Pandas, Numpy, SPARK, Google Cloud, PostgreSQL, TimeScaleDB, MongoDB, MariaDB and Google BigQuery

#### Others

RabbitMQ, Kafka, Git/GitHub and Docker

### Publications

- Article **Optimal Gas Subset Selection for Dissolved Gas Analysis in Power Transformers.**  
**José Pinto et al.** Under peer-review for the *International Journal of Prognostics and Health Management*.
- Article **A flexible synthetic data generation framework for tabular data.**  
**Pinto and Sousa.** Under peer-review for the *Engineering Applications of Artificial Intelligence*.

### Languages

Portuguese Native speaker  
English Full professional fluency