

# Bernardo Casaleiro | Data Engineer

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## Education

### Instituto Superior Técnico

*Masters in Information Systems and Computer Engineering*  
Algorithms and Intelligent Systems Focus

**Lisbon, Portugal**

2016–2018

### University of Coimbra

*Bachelor in Software Engineering*

**Coimbra, Portugal**

2013–2016

## Master's Thesis

**Title:** *Morphosyntactic Label Disambiguation*

**Supervisors:** Professor Bruno Martins & Professor Nuno Mamede

**Description:** This thesis explored the use of hand-crafted rules in combination with Recurrent Neural Networks and Conditional Random Fields to disambiguate 11 different morphosyntactic labels for each word.

## Work Experience

### Meight

*Data Engineer*

**Lisbon, Portugal**

October 2019–Present

- Set up and managed a Cassandra cluster of up to 9 nodes, and its backup system.
- Implemented the Primeight Open Source Python package to standardize how people inside Meight interacted with Cassandra.
- Set up monitoring and analytics for all services using ELK Stack, which led to an API success rate of over 99.5%.
- Designed and enforced a plan that reduced AWS costs by 65% while improving uptime of all systems.
- Implemented and managed multiple ETL pipelines using Apache Airflow.
- Designed and implemented multiple API services using FastAPI.

### Meight

*Data Scientist*

**Lisbon, Portugal**

February 2019–January 2020

- Developed a pipeline to assess the quality of the received data.
- Implemented a Complex Event Processor using Siddhi to detect and correct driver mistakes in real time.
- Implemented an ETL pipeline to automatically detect the beginning and end of Trips.

### muse.ai

*Artificial Intelligence Engineer*

**Lisbon, Portugal**

September 2017–December 2018

- Designed and developed the company's distributed file system.
- Developed Object Recognition, OCR and Action Recognition pipelines and respective curation tools.
- Designed and trained a deep learning model to perform OCR using Keras with Tensorflow.

### Stratio

*Web Developer*

**Coimbra, Portugal**

May 2015–March 2016

- Full Stack Web Development using Laravel, Node.js, AngularJS and jQuery.
- Worked on an Android application that helps users pick a public transportation route for the city of Coimbra.

### JeKnowledge

*Junior Developer*

**Coimbra, Portugal**

October 2013–May 2015

## Languages

**Portuguese:** Native language

**English:** Full professional proficiency