

Alexandre Pinto

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 [Personal Website](#)

 [Github](#)

 [Linkedin](#)

Work Experience

NOV 2017 - PRESENT

Machine Learning Engineer - [WIT software](#)

At WIT I am responsible for running machine learning experiments, in order to build proof-of-concept prototypes and deploy them to production, with performance and scalability in mind. I work mostly in the Natural Language Processing (NLP) sub-field of Artificial Intelligence, using state-of-art methods. My daily work is composed of research and practical implementation of machine learning solutions.

NOV 2016 - OCT 2017

Backend Developer - [Ubiwhere](#)

I was part of the core team responsible for developing a smart water consumption platform for the city of Porto, Portugal. This meant building a system with high-availability, multi-tenancy and concurrency support. My job involved implementing REST APIs and developing the core of the backend web services. Furthermore, I was also involved in the development of the frontend mobile app, used by hundreds of users and available in multiple mobile operative systems such as Android and iOS.

Technologies used: Django, Django REST Framework, Python Ecosystem, Ionic, Docker, GNU/Linux, git.

OCT 2015 - JUL 2016

Machine Learning Research Intern - [INESCTEC](#) / [CISUC](#)

My job was to develop a filter system that classifies public social data according to their potential relevance to a general audience, filtering out irrelevant information and relying primarily on linguistic features, thereby confirming if relevance can be predicted from a set of journalistic criteria.

Technologies used: scikit-learn, NLTK, numPy, matplotlib, pandas, seaborn, PyQt5.

OCT 2013 - MAR 2014

Software Developer - [Pedro Nunes Institute \(IPN\)](#)

I maintained and developed new features for the information systems.

Technologies used: Java Struts, Ruby on Rails, Git.

Relevant Academic Projects

MAR 2016 - MAY 2016

Default Credit Card Prediction

This project was carried out in the context of the Pattern Recognition course. The goal of this project was to develop classifiers to predict if a given client would be able to pay (or not) its credit card in the next month. The project followed the various steps of a typical machine learning pipeline (data preprocessing, feature selection/reduction, classification and evaluation).

Technologies used: scikit-learn, numPy, matplotlib, pandas, seaborn, PyQt5.

FEB 2014 - MAY 2014

Predicting the memorability of images

This project was carried out in the context of the Artificial Intelligence course. The goal of this project was the automatic classification of images into a degree of memorability by computing their levels of attention according to a set of dimensions.

Technologies used: scikit-learn.

FEB 2014 - MAY 2014

Semantic Search and Recommendation in eCommerce

This project was carried out in the context of the Semantic Web course. The objective of the project was to build an ecommerce website where users could search for electronic products, browse product categories and get recommendations.

Technologies used: Protégé (Ontology editor), Apache Jena, Apache Tomcat.

FEB 2014 - MAY 2014

Expert Contact

This project was carried out in the context of the Software Project Management course. The objective of the project was to build a new way of communication between the nurses and patients with breast cancer during chemotherapy sessions. This project was a partnership between the research team working at Institute of Health and Care Sciences of the University of Gotemburg and the University of Coimbra and was conducted by a multidisciplinary team.

Technologies used: Struts2, Hibernate Generic D.A.O. Framework, Bootstrap, Git.

Role in the team: Developer.

Education and training

➤ University of Coimbra

Master Degree in Informatics Engineering - Intelligent Systems

2013 – 2016

- Graduated with 15/20 average
- Dissertation titled “Classification of Social Media Posts according to their Relevance”

Relevant Courses:

- Pattern Recognition, Artificial Intelligence
- Evolutionary Computation, Adaptive Computation
- Semantic Web, Internet Applications
- Project Management, Systems Integration
- Information Theory, Statistics, Technical Communication

➤ University of Coimbra

Bachelor Degree in Informatics Engineering

2010 – 2013

- Admission Grade: 17.55/20
- Graduated with 16/20 average

➤ High School - Quinta das Flores

Science and Technology Course

2007 – 2010

- Graduated with 16/20 average

Technical Skills

- **Programming Languages:** Proficient in Python, C and Java. Additional knowledge in Action-Script 3.0 and Matlab.
- **Semantic Web:** Ontologies Representation (RDF,OWL), Triple Stores, SPARQL, Apache Jena, NLTK.
- **Artificial Intelligence:** Evolutionary Computation, Supervised/Unsupervised Learning Algorithms, Machine Learning, NLP.
- **Data Structures and Algorithms:** Knowledge of different Algorithmic Paradigms.
- **Control Version Systems:** Git.
- **Web Frameworks:** Django, Django Rest Framework, AngularJS 1, Struts2, , Bottle, Flask, Falcon. Familiar with Rails.
- **Web protocols:** REST/RPC, gRPC with protocol buffers.
- **Hybrid Mobile App Frameworks:** Ionic.
- **Machine Learning Tools:** Keras, Tensorflow, scikit-learn, SciPy stack (NumPy, Matplotlib, pandas), seaborn, Weka.
- **Relational Databases:** PostgreSQL. Familiar with MySQL and Oracle.
- **NoSQL Databases:** MongoDB.
- **Development Tools:** PyCharm, IntelliJ, Datagrip, Eclipse, Netbeans, Sublime Text Editor.
- **Deployment and Infrastructure:** Docker, Ansible
- **Cloud Computing:** AWS EC2, GCP, Azure.
- **Web:** Proficient with HTML. Familiar with CSS and Bootstrap.
- **Operating Systems:** Competent in GNU/Linux and Windows.

- ⤵ **Productivity/Project Management Tools:** LaTeX, Trello, Slack.
- ⤵ **Languages:** Portuguese (fluent,native), English (Very Good).
- ⤵ **Professional:** Self-motivated, Self-learner, Team Player, Planning and Organizational Skills.
- ⤵ **Activities & Interests:** Reading, Exercising, Programming by passion and hobby.

Publications

- ⤵ **Predicting the Relevance of Social Media Posts Based on Linguistic Features**
Alexandre Pinto and Gonalo Oliveira, H, and Alves, A., New Generation Computing, 2017
- ⤵ **Comparing the Performance of Different NLP Toolkits in Formal and Social Media Text**
Alexandre Pinto and Gonalo Oliveira, H, and Alves, A., pp 1–16, vol 51, SLATE, 2016

Awards, Grants & Honours

Award to the 3% Best Students	2010 – 2011
Award to the 3% Best Students	2011 – 2012