

CONTACT

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- in linkedin.com/in/mercemartin-it-ml-bigml

SKILLS

10+ yrs

Python
Pytest
Git
Html/CSS
Javascript/jQuery
JSON

5+ yrs

Node.js Mocha Flatline WhizzML

I inux

3+ yrs

Django/DRF PostgreSQL

LANGUAGES

Catalan	Native ———
Spanish	Native
English	Proficient
French	High
German	Low

Mercè Martín Prats

Software Engineer and Machine Learning Promoter

PROFILE

In the last years, I've been developing client side libraries that allow programmers to use many different kinds of Machine Learning models to make predictions. I also teach Machine Learning courses and certifications to customers and Companies or lecture in Machine Learning Schools events.

These activities put me in touch with our customers, sharpening my skills to understand their needs and improving my ability to create user-friendly solutions. Also, being part of a support team has contributed to enhacing my error-solving capacities.

I'm happy to work individually or in teams where attention to detail, tests and maintainability are required and appreciated.

EXPERIENCE

VP of Insights and Applications at BigML

Jul 2012 - NOW

Libraries Development and Education

BigML has developed an API-first platform to provide Machine Learning as a Service. My job consisted in developing the open-source libraries and utilities for other languages, like Python and Node.js, to interact with the Https REST API. Lately, my work has heavily shifted towards Education tasks and applying BigML's technology to Customer's Projects.

Python bindings creation and maintainance - https://github.com/bigmlcom/python

- Managing (CRUD) ML resources
- Creating predictions using the JSON export of 11 different ML models for: classification, regression, clustering, anomaly detection, topic
 modeling, association discovery, object detection.
- · Creting evaluations, rules and other ML insights

Node.js bindings creation and maintainance - https://github.com/bigmlcom/bigml-node

- · Managing (CRUD) ML resources
- Creating predictions using the JSON export of 11 different ML models for: classification, regression, clustering, anomaly detection, topic modeling, association discovery, object detection.
- · Creting evaluations, rules and other ML insights

BigML-GAS: Using BigML in Google Sheets - https://bigml.com/tools/bigml-gas

 $\bullet \ \ \text{Google Sheets add-on developed in appscript allowing BigML's models to make predictions based on spreadsheets data}\\$

Coordinating other bindings development

- · Coordinating Design and Implementation of the above mentioned utilities in other programming languages: Java, PHP, Swift, Clojure, etc.
- Assisting in customer support for the usage of BigML's platform

BigMLer command-line utility: https://github.com/bigmlcom/bigmler

- · Designing and Implementing BigMLer, a command line application for descriptive Machine Learning model creation
- $\bullet \ \ \, \text{Designing and Implementing BigMLer's workflows for Cross-validation, Reification and Feature Selection.}$
- · https://github.com/bigmlcom/bigmler

Developing Customer Projects

- · Assisting in behavioural changes for patients in cardiac rehabilitation
- · Object Detection for the Land Registry
- Mapping tool for e-learning, telecare, telework EU-funded projects https://mappingtool.projects-espaciainserta.com/tool
- · Hotel Accessibility
- Module to add BigML models in MLFlow https://github.com/bigmlcom/bigmlflow
- $\cdot \ \, \text{Customer Assistance: creating and maintaining WhizzML scripts for Machine Learning Workflows https://github.com/whizzmL/examples}$

Education and Communication Tasks

- · Lecturing in BigML's Machine Learning Schools https://bigml.com/education/#schools
- Lecturing in Universities and Colleges: UB, UAB, UPV, Nyenrode, RDDC
- Designing BigML's Certification courses and Exams https://bigml.com/certifications
- · Lecturing and Evaluating BigML's Certification courses
- Designing and Lecturing in BigML's Workshops and Customized Machine Learning courses
- ML-related blog posts https://blog.bigml.com/author/martinprats
- ML-related education Jupyter Notebooks https://github.com/mmerce/notebooks

Technologies include:

- Python, Node.js, Pytest, Mocha, WhizzML, Flatline, Nginx, Github, MongoDB, Ubuntu
- · Grafana, Docker, Streamlit, PotsgreSQL
- · JSON, Latex, HTML/CSS, Keynote

2008 - 2009

Mathematical Sciencies (sparse courses)

UB - Barcelona

2000 - 2007

Computer Science Technical Engineer

UNED

1987 - 1996

Theoretical Physics Ph.D.

UB - Barcelona

ONLINE COURSES

2025

Power BI Visualizations

www.adams.es

2012

Software as a Service

www.coursera.org

2012

Algorithms I

www.coursera.org

2012

Natural Language Processing

www.coursera.org

2011

Artificial Intelligence Machine Learning

www.coursera.org

CONFERENCES

2024

Al & Big Data Congress

Barcelona

2019

CodeMotion

Milan

2019

ML adoption (speaker)

Glasgow

2015

PyconEs (speaker)

Valencia

2014

Pycon

Montreal

Software Engineer

Backend Developer at Neventum

Neventum 3.0 platform's development, created from the evolution of many portals grown under neventum.com

- · Development of modules in the platform
- · Database schemas maintenance
- · Development of the underlying programming framework (Lemur/PHP)
- · Assisting in a Machine Learning proposal application

Technologies include:

- · PHP Lemur
- · jQuery, Github
- · MySQL, MongoDB

Consultant and Software Engineer

Software Developer at Habitatge Jove

2002 - 2004

Apr 2011 - Dec 2011

Web and tailored backoffice utilities for flats and rooms rental administration. Web site includes a section where anyone can publish a room for rent offer for a limited amount of time, even if they are not managed by Habitatge Jove.

- · Consulting and Management of DNS, Firewall and Backoffice application modifications
- · Designing and implementating of new reports and queries with VBasic and Macros

Technologies include:

- · VBA, ASP, Macros
- · Access, Word, Excel

Research and Development

2000 - Dec. 2010

Systems Analyst at Interacció Editorial - Enciclopèdia Catalana

Responsible for the design and implementation of software required to edit and publish the Catalan Enciclopaedia, Catalan Dictionary and other web-based products and services of the Publishing Company.

Responsible for the design and implementation of an Editor 2.0 for the articles in enciclopedia.cat. Including user authentication, versioning, workflow automation, document indexing and LaTeX mathematical edition capabilities

- \bullet Designing and implementating the edition and indexing process as services in an internal network
- Implementing a queue based system for steady parallel bulk updates
- Defining an XML schema for the documents
- Customizing of existing HTML editors to meet the XML syntax needs
- · User authentication and permision management module

Design and Development of the 2.0 Editor and web site for Agora's (distribution company) dataset at agorallibres cat

- Designing and implementating the edition and indexing process as services in an internal network
- · Implementing internal RPG bulk updates
- · Definition of an XML schema for the documents
- · Customization of existing HTML editors to meet the XML syntax needs

Design and implementation of all the web sites created for the diverse company products

- Digec.cat: Commercial web site of EC addressed to bookstores. With user profile management and customer account information. Again an HTML export of the item fund database
- · Dictionaries: Diccionari multilingue, DIDAC diccionari de català, Multicerca Gran Diccionari de la Llengua Catalana
- External projects: Intranet management application for EADOP's publishing projects (Generalitat de Catalunya)
- Educational CD-Roms: Economia per a no economistes (UB Media), Diccionari de l'IEC

Technologies include:

- · RPG, PHP, JSP, Java
- MySQL, DB2
- · TiniMC, Ajax

OTHER COURSES

AJAX PHP JavaScript TCP/IP Networks Security ILE/RPG, DB2 Visual C++

ASSOCIATIONS

ATI

www.ati.es

Societat Catalana de Física

www.scfis.iec.cat

Cor de Cambra de la Diputació de Girona

www.cordiputaciogirona.wordpress.com

RPG programmer

Programmer at Interacció Editorial - Enciclopèdia Catalana

Involved in the development of the Educational Products created by the publishing company.

Educational CD-Roms development

- Compacta (3rd. edition participating in all editions)
- El món interactiu

Technologies include:

- RPG
- DB2

Administrative Assistant

Secretary tasks at ProEixample

Barcelona's City Hall civil servant.

Administrative tasks support for a Company promoting architectural renovation in the Eixample district

- · Supporting accountability and administrative tasks
- · Depeloping an application to help in renovation funding applications

Technologies include:

- · VBA, Macros
- · Access, Excel, Word

Education and Research

Associated teacher at University of Barcelona

Teaching 3rd year courses for Physics students

- · Lecturing Mathematical Methods III (problems)
- Monitoring and Evaluating Laboratory work
- · Attending PhD courses, seminars and congresses

Administrative Assistant

Secretary tasks at Barcelona's City Hall Citizen Protection Service

Barcelona's City Hall civil servant

Local Police and Firefighters Services' Coordination secretary

- Supporting administrative tasks
- · Filing documents

1996 - 1998

1990 - 1996

1998 - 2000

1993 - 1994

1988 - 1991