# Marc Garcia

# CURRIULUM VITAE



Data Scientist, expert in Python, machine learning, and finance.

## Experience

Mar/2015- Contractor Data Scientist, Quantitative Mining, London / Mallorca.

Present Data science and data engineering services.

- Bank of America Data pipelines implementation using parallel computing.
  - Technologies: Python, Quartz.
- Logitravel Revenue optimization in digital marketing campaigns, using machine learning.
  - Technologies: Python, Pandas, Numpy, Sklearn, Bokeh, Mongo.
- Feb/2011 **Development leader**, Nipon Telegraph and Telecom Corporation, NTT, Barcelona.
- Jan/2012 Development of sysadmin tools to automate backups, monitoring, server maintenance, etc. Maintanace of Information System for software and hardware inventory.

Reporting systems with monitoring, fault, and performance information.

Technologies: Python, Django, MySQL, Celery, XML RPC.

- May/2009— Google Summer of Code Scholar, Django Software Fundation.
- Aug/2009 Internalization improvements in Django.

Technologies: Python, Django.

- Mar/2005- Contractor software developer, Barcelona.
- Sept/2013 Development of ad-hoc software projects in Python.
  - Unilever Application for hospitality section sales force.
    - Technologies: Python, Django, PostgreSQL, JavaScript, JQuery, FileSystem API.
  - Caixabank Website to manage school visits to museums owned by the bank.
    - Technologies: Python, Django, MySQL, JavaScript, JQuery.
- Mar/2003- **Software analyst**, *SBD Technologies (currently Alten)*, Barcelona.
- Mar/2005 Responsible for the development of software projects for the banking industry.
  - **CAM** Integration software for banking applications Kondor+ and Panorama.
    - Technologies: C, Solaris, Visual Basic, MS SQL Server.
  - Caixabank Software to manage the bank publicity budget.
    - Technologies: Visual Basic, Oracle.
- Feb/2001- Programmer and BI consultant, Azertia (currently Indra), Barcelona.

Feb/2003 Software developer and Business Intelligence consultant in different projects.

- **Applus** Development of application for vehicle inspection.
  - Technologies: Visual Basic, MS SQL Server.
- Government of Catalonia Reporting system for statistical demographic data.
  - Technologies: Visual Basic, MS SQL Server, Cognos.
- Gas Natural Development of reporting system for customer information.
  - Technologies: Cognos.

### Education

#### Oct/2013- International Master in Finance,

Jun/2014 Escuela de Alta Dirección y Administración, EADA, Barcelona.

Ranked 21st best pre-experience finance master in the world by Financial Times in 2013. Main courses:

- Corporate finance: financial accounting, valuation, M&A, private finance, auditing.
- **Financial markets**: risk management, equity markets, capital markets, forex, derivatives, energy markets, trading, portfolio management.
- Management education: strategic management, leadership, personal communication, negotiation, team working, business analysis, ethics.

#### Feb/2012- Master in Artificial Intelligence,

Jun/2015 Universitat Politècnica de Catalunya, UPC, Barcelona.

Specialization in machine learning.

Master thesis on pattern recognition in financial time series in progress. Main topics:

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- AI: problem solving, complex networks, PGM.
- **Machine learning**: supervised/unsupervised learning, data mining, optimization, validation protocol, computer vision, natural language processing.

Technologies used:

- **Python for data analysis** (pandas, numpy, scipy, matplotlib and scikit-learn) for projects on machine learning, exploratory analysis and complex networks.
- R for projects with neural networks.
- Matlab for projects on computer vision.
- Java for projects in problem solving and NLP.
- **C** for projects on optimization.

#### Feb/2001– Technical Engineering in Computer Science,

Jun/2011 Universitat Oberta de Catalunya, UOC, Barcelona.

Specialization in business management.

# Professional development

- 2012 Introduction to computational finance and financial econometrics Coursera (University of Washington), 10 weeks
- 2012 Introduction to Finance, Coursera (University of Michigan), 10 weeks
- 2012 Introduction to Statistics, Udacity, 7 weeks
- 2012 Machine Learning, Coursera (Stanford University), 10 weeks
- 2011 Introduction to Artificial Intelligence, Udacity, 10 weeks
- 2005 **Ekon ERP**, CCS (Barcelona), 3 weeks
- 2002 Java Servlets, IDS Group (Barcelona), 80 hours
- 2001 Cobol/CICS/DB2, IESIM (Barcelona), 210 hours

## Languages

NativeSpanishNativeCatalanFluentEnglishFluentPortugueseBasicFrenchBasicChinese

## Computer skills

**Programming** Expert: Python, JavaScript/JQuery

Experience with: C, bash, PHP, VB/VBA, Java Methodologies: TDD, OOP, Agile, Scrum

Tools: Git, Trac, Subversion

Data tools Pandas/numpy/scipy/sklearn, Matlab/Octave, R, Cognos

Databases Mongo, SQL, PostgreSQL, BigTable, MS SQL Server

OS Red Hat, Debian, Mac, Solaris, Microsoft Windows

Misc Django, Google App Engine, HTML/CSS, Computer networks

#### **Talks**

- 2016 Outreach Digital, London. Machine learning for digital advertising.
- 2016 PyData London. Machine learning for digital advertising.
- 2016 PyData Madrid. Understanding random forests.
- 2016 PyData Amsterdam. CART: Not only classification and regression trees.
- 2015 PyBCN, Barcelona. High Performance Python.
- 2011 EuroPyCon 2011, Florence, Italy. Remote execution of Python scripts.
- 2009 DjangoCon 2009, Portland, OR. Panel on GSoC projects.
- 2008 Jornades de programari lliure, Barcelona. Django tutorial.

#### Miscellaneous

- 2016 Organizer of the PyData Mallorca.
- 2013–2014 Class delegate at the International Master in Finance.
- 2012–2014 Organizer of a hiking group.
- 2010–2011 Organizer of the Portuguese language exchange group in Barcelona.
  - 2007 Certificate in Massage Therapy, at Escola de Massatge Manual, Dr. Sagrera.