# Juan Quintana

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## WORKING EXPERIENCE

· **Japan Meteorological Corporation** — **Osaka, Japan**
*Chief Engineer* — *2015 – currently*

- CFD models: WindSim, WAsP and Phoenics
- Datamining to study patterns of apps usage in Japan
- Web data scraping and analysis of contamination spread
- Analysis of weather application content and customer preferences in Japan
- Setup Galion Doppler Lidar device
- Wind Offshore exhibitor staff in WIND EXPO 2016
- Development of environmental software: data analysis for pollution and wind assessment services
- Forecasting, Machine Learning: wind power generation, electricity demand.
- Doppler Lidar data processing

· **EREDA, Renewable Energy Solutions** — **Madrid, Spain**
*Research and Development Department Manager: Meteorological Technician & Senior Developer* — *2012 – 2015*

- Solar and meteorological (WRF) modelling.
- Data processing and statistical analysis software development.
- Management, design, development, testing and server implementation of web application.
- Technical and functional analysis of software projects.

· **Foundation for Research of Climate Change (FIC) and Meteogrid** — **Madrid, Spain**
*Meteorological Technician & Software Developer* — *2010 – 2012*

- Use, development and validation of statistical downscaling technique for climate forecast.
- Local and synoptic subjective weather conditions forecast in Spain.
- Preparing weather and climatic reports in different places of the world.
- Technical contributions in scientific poster.
- Management and processing of massive datasets.

· **Spain Meteorological Agency (AEMET)** — **Málaga, Spain**
*Aeronautic meteorological observer* — *2010*

- Government employee in Prediction and Monitoring Group of Andalucia, Spain.
- Support of meteorologist and meteorological monitoring.

· **Spain Meteorological Agency (AEMET)** — **Madrid, Spain**
*Fellow graduate* — *2007 – 2009*

- Project ENSEMBLES: "Application of dynamic techniques of downscaling for seasonal forecast".
- European Centre for Medium-Range Weather Forecast (ECMWF) supercomputer use.
- Working with numerical models for seasonal forecast.

· **CORITEL SA (Accenture Spain)** — **Madrid, Spain**
*Junior Programmer* — *2006 – 2007*

- Lotus Notes environment: errors control, technical and functional analysis.

## EDUCATION

· **College course in Satellite Remote Sensing : 800 hours** — **Distance course**
*Spanish Distance Learning College (UNED)* — *2009 – 2010*

· **Aeronautic meteorological observer course: 120 hours** — **Madrid, Spain**
*Spain Meteorological Agency (AEMET)* — *2009*

· **Training course in Junior Programmer: 320 hours** — **Madrid, Spain**
*Coritel SA (Accenture Spain)* — *2006*

· **Course: "Programming languages": 309 hours / C, C++y Visual C++** — **Guadalajara, Spain**
*CEI & Languages Academy* — *2005*

Mar 2017

· **Degree in Physics: applied physics option** — **Madrid, Spain**
*Universidad Autónoma de Madrid (UAM)* — *1999 – 2004*

## MAIN TECHNICAL SKILLS

· **Programming languages:** Fortran, Shell-Script, AWK, R, MatLab, Lotus Notes, C, C++, OpenMP, Visual C++, Visual Basic, Python, Numpy, Pandas, Scipy, Git, Java, Java-Script, jQuery, Angular JS, SQL, HTML, CSS, LaTeX, PHP, Apache
· **Databases:** MySQL, MongoDB
· **Tools:** Python libraries for Machine Learning: Scikit Learn, StatsModels / Web services of interest: Kaggle, GitHub, Coursera, Udacity
· **OS:** Linux (Ubuntu, Debian, CentOS, Redhat), Mac OS X, Windows
· **Languages:** ENGLISH - B1 TOEIC ∗ SPANISH - MOTHER LANGUAGE ∗ Studying Japanese

## OBJECTIVE STATEMENTS

Begin a professional career in Japan ∗ Learn Japanese language ∗ Live in Japan for a long time.

## ANNEX - EVOLUTION OF TECHNICAL KNOWLEDGE

· **Skills developed outside work** — **Currently**

– **Python** — *Advanced Level*
Algorithms development: data web parsing, data processing and analysis -> DATA MINING.
Frameworks Numpy, Pandas and Scipy usage. Machine learning libraries: Scikit Learn, StatsModels
Web API for Python: Evernote, Twitter, Lindekin.
Python Web Framework: Bottle. Machine Learning competitions.
– **R, MatLab** — *Advanced Level*
Meteorological and climatic data mining and statistical analysis.
– **LaTeX** — *Medium Level*
Technical and personal templates/documents creation.
– **PHP, HTML, CSS, Javascript** — *Advanced Level*
Websites creation, maintenance and management. Data web parsing.
– **LINUX / Shell-Script** — *Advanced Level*
Scripts development to process and manage datasets.
Root account using of operative system based in Linux / Unix (Ubuntu, Debian, Mac OS X).

· **Japan Meteorological Corporation** — **2015 – currently**

– **Project management and software development** — *Advanced Level*
Data analysis, post processing and consultancy for environmental projects
(pollution and wind assessment).
– **CDF models** — *Medium Level*
Usage of CFD models for dispersion projects and wind assessment.
– **Forecasting** — *Medium Level*
Research and Development for the implementation of prediction models for energy business services.

· **EREDA, Renewable Energy Solutions** — **2012 – 2015**

– **Project management and software development** — *Medium Level*
Consultant in Windows 8 desktop app development project.
Technical and functional manager of web application development platform for visual and
statistical data analysis made in Django framework.
– **Hardware and software management of company** — *Medium Level*
Linux web server installation and management.
Networks management and monitoring.
Computers and information systems management.
– **Python, Object Oriented Programming** — *Hight Level*
Modeling, data proccesing.
Django project (backend) design and development.
– **MySQL** — *Advanced Level*
Management and data processing.
Django project (backend) development.
Data storage and backup systems development of company.
– **HTML, CSS, Javascript, javascript frameworks: jQuery, Angular JS** — *Medium-Advanced Level*
Django project (client side) design and development.

- **C++ , Object Oriented Programming** *Medium-Advanced Level*
  Data processing scripts development written in Object Oriented Programming and in parallel execution programming with OpenMP.
  Development of solar production algorithm using Object Oriented Programming and own libraries.
- **LINUX / Shell-Script** *Advanced Level*
  Data processing scripts and jobs development. Ubuntu OS user with root account.
- **R y Matlab** *Advanced Level*
  Modeling, data statistical analysis and plotting in R environment.
- **CDO, XConv, GRIBEX, Ferret, etc** *Medium Level*
  Use and development with command scripting to process and manage binary data (GRIB and NETCDF format).
- **FORTRAN** *Advanced Level*
  Modeling and data processing.

· **Foundation for Research of Climate Change (abbreviation into spanish, FIC) and Meteogrid** **2010 – 2012**

- **FORTRAN** *Advanced Level*
  Modeling with statistical algorithm, heavy computations and data processing.
- **LINUX / Shell-Script** *Medium Level*
  Data processing scripts and jobs development. Ubuntu OS user with root account.
- **R** *Basic Level*
  Modeling, data statistical analysis and plotting in R environment.
- **Python** *Basic Level*
  Data processing and web parsing.
- **CDO, GRIBEX, Ferret, etc** *Basic Level*
  Use and development with command scripting to process and manage binary data (GRIB and NETCDF format).

· **Agencia Estatal de Meteorología (AEMET)** **2007 – 2009**

- **FORTRAN** *Medium-Advanced Level*
  Modeling with dynamical algorithm, heavy computations and data processing.
- **LINUX / Shell-Script y AWK** *Medium Level*
  Data processing scripts and remote jobs development. RedHat OS user with root account.
- **Metview, CDO, GRIBEX, Ferret, etc** *Basic Level*
  Use and development with command scripting to process and manage binary data (GRIB and NETCDF format).

· **CORITEL SA (Accenture Spain)** **2006 – 2007**

- **LOTUS NOTES** *Medium-Advanced Level*
  Maintenance and development: errors control, software and databases technical and functional analysis.
- **Java (Education)** *Basic Level*
  Java education during 3 weeks in company: basic Object Oriented Programming and background running by *pipes*.
- **JavaScript, HTML, SQL, ASP (Education)** *Basic Level*
  Basic education during 2 weeks in company.
- **Visual Basic (Education)** *Basic Level*
  Education during 1 month and practise programming a Windows desktop application with web interaction.

· **EDUCATION: Course "Programming languages"** **2005**

- **C, C++y Visual C++(Education)** *Basic-Medium Level*
  Course during 309 hours and practise programming a Windows desktop financial management software.