

# Jorge Barata *November 1, 1987*

BSc. IN COMPUTER SCIENCE AND ENGINEERING,  
MSc. IN DISTRIBUTED SYSTEMS

Madrid, Spain

☎ +34 619 98 15 38  
✉ [contact@jorgebg.com](mailto:contact@jorgebg.com)  
🐙 [github.com/jorgebg](https://github.com/jorgebg)  
in [linkedin.com/in/baratajorge](https://linkedin.com/in/baratajorge)  
🌐 [jorgebg.com](https://jorgebg.com)

## Summary

Senior Software Engineer, specialized in **full stack web engineering** mainly with *Django*, *SQL*, *React*, *Celery*, *Elastic Search*, *virtualization*. Experience in **machine learning** with *Scipy* and *scikit-learn* and **big data** with *Spark*.

Strong **software design** skills, looking forward to developing a career as **Software Architect**, having gathered extensive knowledge in integrating a broad range of **cutting-edge technologies**.

Active **free and open-source software** contributor.

## EXPERIENCE

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*Please refer to his Linked-in profile to see the recommendations.*

### SENIOR SOFTWARE ENGINEER

March 2017 – today • *Udemy for Business*, Dublin

Focus on the students experience.

Build the taxonomy management system for the course collection.

Adopt Udemy marketplace search engine and develop new features (Elastic Search).

Code review, mentor other engineers.

Investigate possible technological improvements for the product.

🌐 [udemy.com](https://udemy.com)

### CHIEF TECHNOLOGY OFFICER

November 2016 – today • *Cooperativa Social Los Mochuelos*, Madrid

Technology advisor for the different initiatives of the cooperative.

Development and maintenance of the *Reutiliza* project.

System management and software development.

🌐 [mochuelos.com](https://mochuelos.com) 🌐 [reutilizabocema.com](https://reutilizabocema.com)

### SOFTWARE ENGINEER

July 2015 – March 2017 • *Udemy for Business*, Dublin

Build scalable, testable and robust software systems to support a high traffic website.

Operate at all levels of the stack, with strong experience in a some areas.

Work in a fast paced agile environment with rapid iteration.

Be effective in a distributed team through strong communication.

🌐 [udemy.com](https://udemy.com)

### CHIEF TECHNOLOGY OFFICER

June 2014 – November 2014 • *Indievelopment*, Dublin

User requirements gathering of our target through interviews, web forms and social networks.

Designed the software architecture for deployment on Microsoft Azure, and created the landing page with the web forms.

🌐 [indievelopment.info](https://indievelopment.info) 🌐 [launchbox.ie/companies/indievelopment](https://launchbox.ie/companies/indievelopment) 🌐 [azure.microsoft.com](https://azure.microsoft.com)

## FULL-STACK WEB ARCHITECT

January 2013 – June 2014 • *Vivocom EU, Spain*

Extended the web application architecture (Yii+MySQL) with MongoDB, caching, background workers and queuing, automation tools (Grunt), TTD, code quality linter, web security pentesting. Redesigned the JavaScript client application with CoffeeScript, CommonJS and Bower. Also trained the team for those new technologies/paradigms.

Software design with ArgoUML, Continuous Integration with Git/Github, Agile development with Kanban/Scrum/Redmine

Server side performance optimization with PHPcache. Database query optimization of MySQL/MongoDB.

100,000 registered users in its first year. Funded by the Spanish Ministry of Industry, Energy and Tourism as part of *Plan Avanza 2* program. It was awarded the Prize for Most innovative business project by the *Inspirational Festival* of 2013.

References: Raúl Fernández Fraile [🔗 linkedin.com/in/rfraile](https://www.linkedin.com/in/rfraile), Kublai Gómez Soto [🔗 linkedin.com/in/kublai](https://www.linkedin.com/in/kublai)  
[🔗 keepunto.com](https://keepunto.com) [🔗youtu.be/usjou9iFj7U](https://youtu.be/usjou9iFj7U) [🔗 planavanza.es](https://planavanza.es) [🔗 inspirationalfestival.com](https://inspirationalfestival.com)

## SOFTWARE ENGINEER

September 2012 – December 2012 • *Vivocom EU, Spain*

Built a real time chat for the KeePunto website. Mostly worked alone and remotely, meeting up once a week. Integrated an Ejjaberd chat server with the current application architecture: the data model was hosted on Aneki servers and accessed through WSDL, and the web application was in KeePunto servers. Web client built with Ember.js and a XMPP js client.

[🔗 keepunto.com](https://keepunto.com) [🔗 anekis.es](https://anekis.es)

## JUNIOR SOFTWARE ENGINEER

April 2011 – January 2012 • *Vivocom EU, Spain*

His first task was the migration from the old application to Yii Framework, and teach the framework to the team.

Analyst programmer and Web Developer, mainly with PHP + MySQL stack and JavaScript. Also helping as systems technician with Apache, Ubuntu and Amazon EC2.

Optimized the most heavy database queries, and the web client with PageSpeed and CloudFlare. Also improved the display algorithm that placed user-published photos, videos and texts into an horizontal wall.

Max peak reached with 12,500 unique visitors in one day.

Agile Development with Redmine and continuous integration with Git/Github.

Reference: Raúl Fernández Fraile [🔗 linkedin.com/in/rfraile](https://www.linkedin.com/in/rfraile)

[🔗 koowall.com](https://koowall.com) [🔗 vimeo.com/37125476](https://vimeo.com/37125476)

## SOFTWARE ANALYST & DEVELOPER

June 2009 – April 2011 • *InDaHouseRulez, Spain*

Developing frontends, customer facing and backend features, multilingual websites with advertising revenues.

Django, Symfony, Yii, Wordpress, MySQL. Also helped as systems technician with web servers (Cherokee, Apache), mail server (Postfix) and Debian/BSD.

Agile Development with ActiveCollab, continuous integration with SVN

Recommendation: [🔗 linkedin.com/in/baratajorge/en#recommendations](https://www.linkedin.com/in/baratajorge/en#recommendations)

Reference: Rubén Hernández [🔗 linkedin.com/in/rubenhernandeza](https://www.linkedin.com/in/rubenhernandeza)

Examples: [🔗 indahouserulez.com](https://indahouserulez.com) [🔗 usitility.com](https://usitility.com) [🔗 regalomascotas.com](https://regalomascotas.com) [🔗 quevicio.com](https://quevicio.com)

## COMPUTER TECHNICIAN

September 2008 – June 2009 • *Carlos III University of Madrid, Spain*

Customer Service Center, technical support of the university, providing assistance to both staff and students. Computer maintenance (hardware and software), printers, networks, etc., Mainly Windows systems, but also Mac OS, problems resolved remotely from the office except when physical access was required.

[🔗 cau.uc3m.es](https://cau.uc3m.es)

## EDUCATION

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B.SC. COMPUTER SCIENCE & ENGINEERING, M.SC DISTRIBUTED SYSTEMS August 2007 – August 2017 • *Carlos III University of Madrid, Spain*

Bilingual (Spanish and English), First class honors on Network Computing (2009).

## SKILLS

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PREFERENCES: Full stack, Django, React, Git, GNU/Linux

### WORKING KNOWLEDGE

**S/W Development:** Python, JavaScript, PHP, Java, Node.js, Atom, NetBeans, Eclipse.

**S/W Architecting:** Open-source based, IaaS/PaaS.

**S/W Engineering:** UML, OOP, MVC, ArgoUML, Visual Paradigm.

**Continuous Integration:** Git, Github, Travis CI.

**Agile Development:** Kanban, Scrum.

**Web frameworks:** Django, Yii, Symfony, Flask.

**JS frameworks:** React, Angular.js, Ember.js, ExtJS, jQuery.

**UX/UI:** HTML5, CSS, SASS, Twitter Bootstrap.

**Database Engineering:** Entity-relationship modeling, MySQL Workbench, MongoDB.

**S/W Quality Auditing:** Reliability, efficiency, security, scalability.

**Server-side Optimization:** PHP/MySQL/MongoDB, Profiling/Benchmarking, Caching, xdebug, load testing.

**Client-side Optimization:** PageSpeed, CloudFlare, Amazon S3.

**Testing:** Unit testing, End-to-end testing, Selenium.

**Web API Design:** REST, OAuth, Swagger.

**Build Automation:** Make, Ansible, Grunt.js.

Others: Debian/Ubuntu, Bash/ZSH, Vim, Regular expressions.

### BASIC KNOWLEDGE

**Test/Behavior Driven Development:** PHPUnit, Vows.

**CMS Development:** Rails, Redmine, Drupal, Wordpress, Chamilo, Moodle.

**Web API consuming:** WSDL, SOAP.

**Cloud Computing:** VirtualBox, Amazon AWS, Linode, Heroku, Microsoft Azure, scalability.

**Message-oriented middleware, Message Queuing:** , Web Sockets, Socket.IO, AMQP, RabbitMq, Celery, Amazon SQS.

**Concurrent Computing:** multi-threading, background jobs, workers.

**Reactive Programming:** Akka.

**Machine Learning and Data Analysis:** Numpy, Scipy, Scikit-learn, Pandas.

**Pentesting:** Metasploit, Wireshark.

Others: PyGTK, Google Apps, LaTeX, Gimp, Pomodoro, server hardening, Titanium SDK, OpenWrt.

### LANGUAGES

**Spanish:** C2 native

**English:** B2 fluent

## PROJECTS

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Please refer to his *GitHub* profile or  *jorgebg.com* to see a more detailed list.

### OPEN SOURCE

**Yii extensions:** OAuth and OpenId along others.

 [github.com/search?q=yii+user:jorgebg](https://github.com/search?q=yii+user:jorgebg)

**Redmine extensions:** OpenId Selector, Aurora theme.

 [github.com/search?q=redmine+user:jorgebg](https://github.com/search?q=redmine+user:jorgebg)


**Assembly line simulator:** Developed with Java. Each robot is run on a different server. They all communicate through TCP/IP. There is also a SCADA for the control of those remote stations.

Project for ARCOS, Computer Architecture and Technology Area of the Carlos III University of Madrid.


 [github.com/jorgebg/scada-ssii-uc3m](https://github.com/jorgebg/scada-ssii-uc3m)

**Natural language to Java compiler:** Java app that transforms a program described in natural language into a Java program.

Project for GIAA, Applied Artificial Intelligence Group of the Carlos III University of Madrid.

 [github.com/jorgebg/language-processors-ii](https://github.com/jorgebg/language-processors-ii)

**Lumpy:** Python app that sends an email to a single recipient straight to his MTA.

 [github.com/jorgebg/lumpy](https://github.com/jorgebg/lumpy)

**Tic-tac-toe Sandbox:** Python framework for developing tic-tac-toe bots with different playing algorithms like minimax and neural networks.

 [github.com/jorgebg/tictactoe](https://github.com/jorgebg/tictactoe)

**Vows At:** JavaScript project that improves tests readability. Written in CoffeeScript.

 [github.com/jorgebg/vows-at](https://github.com/jorgebg/vows-at)

**RFID USB Listener:** Python app that reads the events from a RFID reader via USB.

 [github.com/jorgebg/rfid](https://github.com/jorgebg/rfid)

## WEBSITES

**Personal Website** 🌐 [jorgebg.com](http://jorgebg.com): Static website, built with **Jekyll**, open sourced and deployed on Github Pages.

**AJBID** 🌐 [ajbid.org](http://ajbid.org): Association of Retirees of the Inter-american Development Bank. Website backend built with **Yii** & **MySQL**, database migrated from XLS.

**Surprizes** 🌐 [surpriz.es](http://surpriz.es): Online affiliation system built with **Yii 2** & **MySQL**, hosted on a VPS linux server.

**X Bikes** 🌐 [xbk.github.io](http://xbk.github.io): Single-page web app for finding available bikes on bike sharing systems all over the world with CityBikes **REST Api**. Built with **CoffeeScript** & **Bootstrap**, deployed on Github Pages.

**Nórdicos en Adopción** 🌐 [nordicosenadopcion.com](http://nordicosenadopcion.com): Nonprofit animal shelter. Built with **Drupal**, hosted on a VPS linux server.

**Falacias Lógicas** 🌐 [falaciaslogicas.com](http://falaciaslogicas.com): Nonprofit critical thinking disclosure website. Built with **Jekyll**, twitter bot with Tweepy, open sourced and deployed on Github Pages.

**Yii Slides** 🌐 [jorgebg.com/yii-slides](http://jorgebg.com/yii-slides): Yii slides for talks and teaching. Built with RevealJS, open sourced and deployed on Github Pages.

**Projects Manager** 🌐 [projects.jorgebg.com](http://projects.jorgebg.com): **Redmine** instance for managing the projects, integrated with Gitolite, deployed on a VPS linux server. Currently migrated to Github.

**Personal Blog** 🌐 [babel.jorgebg.com](http://babel.jorgebg.com): **Wordpress** instance for saving code snippets, links, etc., deployed on a VPS linux server. Currently migrated to **TiddlyWiki** & **Jekyll**, hosted on Github Pages.

🌐 [nhm.github.io](http://nhm.github.io)

## ACTIVITIES

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### OPEN SOURCE COMMUNITY

Organizer of **Dublin Django User Group**

**Tech Talks** 🌐 [github.com/jorgebg/talks/](http://github.com/jorgebg/talks/)

**Contributed to Django, Yii, FOSRestBundleSymfony**, along others

**StackOverflow** 1K+ reputation 🌐 [stackoverflow.com/u/959819](http://stackoverflow.com/u/959819)

### COMPETITIVE PROGRAMMING

**Dynamic programming and Hackatons** like T3chFest and Tuenti Challenge

🌐 [jorgebg.com/T3chFest-2015](http://jorgebg.com/T3chFest-2015) 🌐 [jorgebg.com/tuenti-contest](http://jorgebg.com/tuenti-contest)

### OTHERS

**Animal Shelter** webmaster, non-profit, web built with Drupal 7 (2011 – 2018, Spain) 🌐 [nordicosenadopcion.com](http://nordicosenadopcion.com)

**Medical Emergency Technician, Civil Defense** volunteer (2005 – 2008, Spain) 🌐 [proteccioncivil.org](http://proteccioncivil.org)

**Music, Martial Arts, Poetry**