

Jorge Barata

BSc. IN COMPUTER ENGINEERING, MSc. IN
DISTRIBUTED SYSTEMS

Madrid, Spain

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Summary

Software Engineer with 15 years of experience, specializing in **data-intensive applications** for the past 9 years. Expertise in *Python*, *Django*, and relational databases. Proficient in **site reliability engineering** and **infrastructure** with *Ansible*, *Terraform*, *AWS*. Experienced 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 state-of-the-art patterns and technologies.

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

EXPERIENCE

SENIOR SOFTWARE ENGINEER

September 2018 – December 2022 • *Eventbrite*, *Madrid*

Eventbrite is the market leader for live event ticketing globally. The platform handles hundreds of thousands of requests during the on-sales.

Worked in a fast paced agile environment with distributed teams in different locations and time zones.

Led the following projects:

- Migration of a Django+PySOA service to a Kotlin+gRPC service. Zero downtime using traffic shadowing and incremental rollout. This resolved existing performance bottlenecks and streamlined the communication across the services in our SOA model.
- Migration of a Redis-backed Django service to ElastiCache, reducing operational overhead and enhancing reliability and scalability.
- Migration of parts of the monolith to SOA services in Django+PySOA, facilitating independent development and scalability.
- Django training for the teams in Spain, empowering engineers with expertise and improving the onboarding, as most of our services were built in Django.

Added new features to the event listing page and ticket order page, which improved the sales funnel.

Joined the SRE team for some time, where I worked on the following projects:

- Migration from in-house infrastructure management system to Terraform and CloudFormation, enabling efficient provisioning and consistent configurations across environments.
- Helped the teams to set up Datadog dashboards, monitoring alerts, SLAs and error budgets, which allowed them to measure performance and improve the reliability.

Conducted over a hundred interviews and delivered many talks in tech events, playing a pivotal role in talent acquisition and knowledge dissemination, enriching our team with diverse talents and fostering industry connections.

Founded and organized the Django Madrid User Group, and Eventbrite sponsored the meetups. This brought more candidates to the hiring pipeline.

Stack:

- Backend: Django, Django REST Framework, Celery, MySQL, Redis, Elastic Search, PySOA, RabbitMQ, Kafka.
- Frontend: React, TypeScript.
- Infrastructure: Docker, uWSGI, HashiCorp (Consul, Nomad, Terraform), AWS (Fargate, DynamoDB, ElastiCache, CloudFormation), NGINX, HAProxy, Ubuntu, GitHub, Datadog, Sentry.

🌐 eventbrite.com 🐙 github.com/eventbrite/pysoa

SENIOR SOFTWARE ENGINEER

July 2015 – August 2018 • *Udemy , Dublin*

Udemy for Business (UFB) team. We created a platform with 20k+ courses offering on-demand, immersive, and cohort-based learning for businesses.

Worked in a fast paced agile environment with distributed teams in different locations and time zones.

Led the following projects:

- Hierarchical taxonomy management system for the course collection. It allowed the customers to organize the courses and increased adoption.
- Refactoring of the UFB's search system, moving from a dedicated implementation to a shared solution for the whole organization, which improved the team speed for developing experiments, new features, and the adoption from external developments.
- Enriched the course search by adding related lectures, which resulted on more search clicks and course consumption.
- A RESTful public API, enabling customers integration to the platform.
- Instrumentalization to monitor the quality of the delivery, alarms that notified the team on fortuitous behaviours.

Developed a self-service system that allowed customers to create learning portals for small teams. This helped to accommodate a market that today represents an important share of the current business.

Migrated old code to new stacks:

- From a in-house PHP framework to Django. This improved the onboarding learning curve.
- From Angular 1 to React+MobX, which gave us more flexibility.

Developed data pipelines for UFB analytics in Amazon Redshift, Pinball, Python and ChartIO.

3rd party services integration: Intercom, Slack, Marketo, PingOne/PingFederate.

Stack:

- Backend: Django, Django Rest Framework, Celery, MySQL, Memcached, Redis, Elastic Search.
- Frontend: React, MobX, Webpack, Babel, Karma.
- Infrastructure: Docker, uWSGI, Fabric, Ansible, CentOS, GitHub, Jenkins, Datadog.

🌐 udemy.com 🌐 business.udemy.com

CO-FOUNDER & CTO

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

Co-founder of the cooperative.

Led the development and launch of the *Reutiliza* project, a place for exchange and reuse of items. Built in Django and PostgreSQL. Deployed on Debian with uWSGI, Nginx and Ansible.

Technology advisor for the different activities of the cooperative, as well as system management and software development. Wordpress multi-site, infrastructure, networking, and office suite.

🌐 mochuelos.com 🌐 reutilizabocema.com

CO-FOUNDER & CTO

June 2014 – November 2014 • *Indievelopment, Dublin*

Co-founder of a LaunchBox 2015 startup (Trinity College's accelerator for student startups).

Designed the software architecture for deployment on Microsoft Azure.

Requirements-gathering through interviews, web forms and social networks.

🌐 indievelopment.info 🌐 launchbox.ie/companies/indievelopment 🌐 www.f6s.com/indievelopment

SOFTWARE ENGINEER

September 2012 – June 2014 • *Vivocom EU, Spain*

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

Software design with ArgoUML, Continuous Integration with Github, Agile development with Kanban/Scrum/Redmine. Server side performance optimization with PHPcache. Database query optimization of MySQL/MongoDB.

Built a real time chat for the website: Integrated an Ejjaberd chat server with a WSDL DaaS. Web client built in Ember.js.

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.

🌐 keepunto.com 🌐 youtu.be/usjou9iFj7U 🌐 planavanza.es 🌐 inspirationalfestival.com

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

Taxi Recommendation System for Big Data: Final dissertation. It consisted of two parts:

- Data pipeline built in SciPy, scikit-learn, and Spark and deployed in the laboratory cluster.
- Web application with geospatial features built in Django and PostGIS.

🔗 github.com/jorgebg/taxi-recommendation-system

M.SC TEACHER TRAINING August 2023 – July 2024 ◦ *Universidad Europea, Spain*

LANGUAGES

Spanish: native

English: fluent (4 years working in Ireland, C1)

ADDITIONAL INFORMATION

Former founder and organizer of **Madrid Django User Group**. 🔗 www.meetup.com/MadridDjango/

Former founder and organizer of **Dublin Django User Group**. 🔗 www.meetup.com/django-dublin/

Imparted the Django web framework course at the IE University.

Over a dozen of tech talks. 🔗 jorgebg.com/talks/

Contributed to OSS projects: **Django**, **Yii**, **Symfony**, along others. 🔗 github.com/jorgebg