

# Matías Mirabelli

## Software Engineer

## About me

Soy desarrollador de software y tengo más de diez años de experiencia en la industria. Me especialicé en el desarrollo de aplicaciones web. Desarrollé sitios web, aplicaciones clásicas request/response, aplicaciones ricas con gran cantidad de componentes e interacción de los usuarios, servicios de backend, servicios de infraestructura como colas y caches, y herramientas de procesamiento y análisis de datos, entre otras cosas. Trabajé con arquitecturas de web services (SOAP), microservicios (REST), web sockets, y request/response clásicos (MVC, streaming), entre otras. Tengo experiencia en la integración con APIs de proveedores y diferentes orígenes de datos.

En desarrollo de backend, trabajé con varios stacks de frameworks en **PHP**, Java, Scala, Kotlin y NodeJS. Entre los problemas comunes de backend que resolví, puedo mencionar autenticación, sesiones, transaccionalidad, acceso a datos, búsqueda de texto libre, manejo de operaciones asincrónicas, gestión y compresión de recursos estáticos (JavaScript, CSS, imágenes, videos, etc.), soporte de idiomas, geolocalización, clusterización de procesamiento y de datos, storage de contenido, seguridad de datos, entre otras cosas.

En desarrollo frontend, considero más importante el diseño de arquitectura que el conocimiento específico de frameworks. Entre los problemas de arquitectura comunes que resolví puedo destacar el diseño de componentes reutilizables, la optimización de recursos en favor de la experiencia del usuario, el manejo de operaciones cross-domain, la personalización, el desarrollo progresivo y activación de features por usuario, el manejo y la persistencia de estado, soporte de idiomas, entre otras cosas. Algunos de los frameworks y utilidades que usé son jQuery, underscore.js, backbone, angularjs, knockoutjs, jqueryUI, y lessCSS.

Valoro el trabajo en equipo y las prácticas para garantizar la calidad: desarrollar en base a principios, buenas prácticas y convenciones, hacer reviews de código, construir conocimiento común a través del diálogo y el diseño de soluciones, adoptar metodologías de organización cuando es necesario. Pienso que poner a las personas sobre los procesos es la clave del éxito de cualquier proyecto.

Apoyo la filosofía del software libre. Participo en la comunidad y trato de usar y contribuir al software libre cuando es posible. En mi tiempo libre desarrollo herramientas sociales para fomentar la transparencia gubernamental, la organización social y la toma de decisiones colectivas. Estudio Antropología Social y Cultural en la Universidad de San Martín y desarrollé varias herramientas como parte de mis investigaciones sobre política y movimientos sociales.

## Links

Github: <https://github.com/seykron>

Resume: <http://seykron.github.io/cv>

Twitter: [https://twitter.com/matias\\_mi](https://twitter.com/matias_mi)

## Languages

Spanish (mother tongue)

English (upper-intermediate)

Esperanto (progresanta)

## Experience in Software Development

### ***Freelance (2004 - 2006)***

***Technologies: PHP, HTML, CSS, JavaScript, Visual Basic, MS Access, Symfony 1.0***

My first jobs were as a freelance programmer. Some projects to mention are the cooperative website for the Labyes Laboratory and a travel management system for a rent-a-car shop developed in Visual Basic. At the same time I was also developing several sites by using Wordpress and Drupal.

### ***Netic infoservicios (2006)***

***Technologies: Visual Basic, MS Access, NSIS***

After finishing middle-school I started working as a Visual Basic programmer at a very small business which had a product that consisted in performing search engine optimizations (SEO). I was the only programmer there and with only few tools I had to solve some architectural and distribution problems. The product was a suite with a couple of applications interacting with one another in order to generate micro-sites with different contents. This suite was distributed as a self-contained installation package. I left this job because my boss asked me to emit illegal receipts.

### ***W3americas (2006 - 2007)***

***Technologies: SourceSafe, Perl, HTML, CSS, JavaScript***

My next job was at W3, a system consulting company focused on web development and maintenance for third party customers. I worked on the progressive maintenance of the website

for Citibank Brasil. I participated in the site's full redesign, mainly developing components that required integration with third- party services like stock exchange tables and currency values, among others. It was my first direct experience with customers, since I often had to coordinate tasks with them. In my free time I learnt about system design principles and Java web applications development. After the site's redesign I left this company because it became boring and there was no development at all, only maintenance.

## **CDA (2007 - 2009)**

*Technologies: SVN, Ant, Java EE (v1.4/1.6 + Web Services), Sybase DB, Ibatis, Struts, JSP, HTML, CSS, JavaScript, Flex (ActionScript 3, Cairngorm)*

After leaving W3 I started working as Java programmer in CDA, an HR consulting company. I worked in the development of internal HR systems such as admissions, retirements, vacations, etc., so I learnt about HR processes. I also had the chance to bootstrap a project: a system to implement SOX controls in order to trace processes within a local bank. Once finished, I left this job because the heads of the system development area mistreated people. I learnt about technical management of development projects, gathered experience in different Java technologies, and gained expertise in the resolution of infrastructure problems such as storage, load balancing, packaging and distribution of Java applications.

## **Globant (2009 - 2013)**

*Technologies: SVN, GIT, Maven, Java EE, MySQL, JackRabbit, Hibernate, Spring MVC, jawr, Freemarker, YahooUI, AWS, ImageMagick, FFMPeg*

My next job was at Globant, another HR consulting company. I entered the company as a web developer for JWT. The project consisted in a full reengineering of a content management system. It organized digital content such as documents, images and videos, and one of the main requirements was to be able to reuse the same platform for different customers; it should be customizable and scalable so JWT could be able to resell the product to their customers. Unlike CDA where I worked with a classical request/response application model, we used a service- oriented application model in this project, so most part of the application responsibility was delegated to frontend where I was working.

Here I had my first experience coordinating a development team for JWT. We started a new project to solve a problem related to JWT agencies fragmentation around the world. Agencies from different parts of the world would be able to submit creative ideas to projects, interact with people, share content and get to know other people's jobs through a social network for projects. In order to encourage participation, ideas for a project were voted by colleagues so the winner idea would be implemented. Before the beginning I had to estimate the whole effort, create the base infrastructure to let the team work on the source code and agree with the customer how we should deliver and show advances of the project. Once started, my role consisted in estimating the different components with the team, splitting them into *sprints*, talking to the customer and, of course, coding with the team and helping to solve technical issues.

This project was a success and one of my most valuable experiences was that when dealing with applications with complex flows, the service-oriented programming may look like an advantage in the beginning, but maintaining an anemic domain actually is very expensive on the long run and therefore it is unfeasible for products that need a constant and long-term evolution, exceptions apart. I learnt to manage AWS services and solve complex infrastructure problems like managing distributed search indexes.

After more than two years working for JWT I started to deal with a new customer of the company: 55social. The challenge was to build a social media management platform to make the content management and marketing campaigns easier in social networks. Thanks to a small and excellent development team the product was online after only four months. After two years of development, the company left Globant and I continued working for 55social.

## **55Social (since 2013)**

*Technologies: GIT, Maven, Java EE, Hibernate, Spring MVC, Katari, Elastic Search, Freemarker, Social APIs (Facebook, Twitter, Google Plus), jQuery UI, Histone, OOCSS, AWS*

Since then I have been working at 55social, a company whose main market is digital agencies from Brazil. We chose a hybrid request/response programming model with a rich front-end without functional responsibilities. As design practices we used *domain driven design* and TDD. As organizing principles we used the Martin Fowler's Rule of Three for refactoring, the Robert Martin's *Single Responsibility Principle* and dependency injection.

The work is feature-oriented and we set commitment by sprints. As feature development time may vary, we split up sprints into checkpoints so we could focus on specific aspects of the feature development and thus we were able to show concrete progress.

While I was at Globant and 55social I was responsible for job interviews and I prepared both workshops and trainings.

## **Software libre**

I developed, maintained and collaborated in different free software projects during many years. The logic behind a free software organization is quite different from the business logic, so the experience managing both kind of projects helped me to develop a critical view of leadership, mainly oriented to problem resolution through collaboration. Many of the projects I started no longer exist, but there are a couple of them that still are published on Github and I would like to comment on the ones I consider more relevant.

### *I stop it (Yo los paro)*

*Technologies: Grunt, JavaScript (NodeJS), MySQL, ExpressJS, Handlebars*

Yo los paro is a campaign to warn people about irregularities in the new argentinian Fuel Law that was finally approved in 2014. The campaign goal was to promote people's direct participation, so without any kind of registration they could send messages to the national legislatures. The long-term goal is to transform this single campaign into a direct participation platform.

### *Argentine congress data importer*

*Technologies: Grunt, JavaScript (NodeJS), Cheerio*

ogov-importer retrieves all bills and their votes from the Argentine National Congress since 2001 until nowadays, the list of current legislatures and the committees' meetings and agendas, among other things. The importer is generic and it is designed to make a fast and efficient crawling of any site.

### Paperhub

*Technologies: JavaScript (NodeJS), Memcached, ExpressJS, Handlebars, Github API*

Paperhub is a proof of concept of a collaborative document editor reading documents from Github. It uses etherpad as editor and pandoc to export documents to PDF.

### IRC client API

*Technologies: Grunt, JavaScript (NodeJS), WebSockets*

irc-client-api allows to connect to IRC servers from the web browser through a low-level API. It supports different transports, so it might be adapted to different devices and environments.

### Pirate crew

*Technologies: JavaScript (NodeJS), ExpressJS, Handlebars, OpenPGP.js*

Pirate crew is a secure registration form whose main goal is to allow people to register while it protects the data so no one with physical access to the server can read it. It encrypts the person's information in the browser with a public key, and the underlying private key is supposed to be splitted into many pieces and distributed by different people.

## Formal Education

National University of San Martín (ongoing) - *Social and Cultural Anthropology*

E.N.E.T N°17 D.E. 20 (2001 - 2006) - *Electronic Technician*

Alfonsina Storni (Primary School)

## Contact

You can contact me by email to [matt@spira.me](mailto:matt@spira.me). Personal references on request.