Matías Mirabelli
Software Engineer

About me

I am a software engineer with more than ten years of experience in the software industry. I am a senior developer specialized in web applications. I developed web sites, classic request/response applications, rich applications with heavy UX and components, backend services, infrastructure services like queues and caches, business intelligence and data processing applications, among others. I worked with different architectures such as web services (SOAP), microservices (REST), web sockets, classic request/response (MVC, streaming), among others. I have experience with third party APIs and data sources integration.

Regarding backend development, I worked with several stacks of frameworks in ~~PHP~~, Java, Scala, Kotlin and NodeJS. Some problems I have solved are user and API authentication, session management, transactions, data access, free text search, asynchronous services interoperability, static resources management and compression (JavaScript, CSS, images, videos, etc.), language support, geolocalization, processing and data clustering, content storage, application and data security, among others.

Regarding frontend development, I think it is more important the software design than mastering specific frameworks. Some problems I have solved are the design of reusable components, optimization of resources focused on user experience, cross-domain operations management, customization, user-based features, state management and persistence, language support, among others. I have worked with frameworks and utilities such as jQuery, underscore.js, backbone, angularjs, knockoutjs, jqueryUI, and lessCSS.

I endorse team work and quality assurance practices in order to build good products. I usually build solutions based on software architecture principles, good practices and conventions. I think that good communication and peer review of code and architecture are some keys for building common knowledge and a good product.

I support the free software philosophy. I am involved in the free software community and I try to contribute whenever possible. In my free time I build social-oriented software like open government, social organization, and decision making software.

Links

Github: https://github.com/seykron

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

Twitter: https://twitter.com/matias_mi

Languages

Spanish (mother tongue)

English (upper-intermediate)

Esperanto (progresanta)

Experience in Software Development

Freelance (2004 - 2006)

My first jobs were as freelance programmer. Some projects to mention are the corporative website for Labyes Laboratory and a Visual Basic-based travel management system for a local rent-a-car shop. I developed several sites by using Wordpress and Drupal.

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

Netic infoservicios (2006)

After finishing middle-school I worked as a Visual Basic programmer for a small company writing software for search engine optimization (SEO). I had to solve several architecture and distribution problems. The product was a static site generator. It consisted of several applications, each one in charge of generating part of the static site. This suite was distributed as a self-contained installation package.

Technologies: Visual Basic, MS Access, NSIS

W3americas (2006 - 2007)

My next job was for W3, a system consulting company focused on web development and sites maintenance for third party customers. I worked on the progressive maintenance of Citibank Brasil website. I was involved 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. I worked with Perl programming language to automate deployments within a proprietary deployment management software. It was a challenge to build cross-browser features since there were very few tools (jQuery was at its early phase).

It was my first direct experience with customers, since I often had to coordinate tasks with them. In my free time I learned Java web applications development.

Technologies: SourceSafe, Perl, HTML, CSS, JavaScript

CDA (2007 - 2009)

After leaving W3 I worked as a Java programmer for CDA, an HR consulting company. I was involved in the development of internal HR systems such as admissions, retirements, vacations, etc. I learned a lot about HR processes. Some challenges were the integration of several databases, the validation of consistency among different data sources, and learning Adoble Flex since it was a requirement to develop the frontend by using this technology. I developed the backend with Java 1.6, Struts MVC and web services in the application layer, and Ibatis in the data access layer.

I also had the chance to bootstrap a new project for a local bank. It was an administrative audit software that implemented SOX controls in order to ensure internal processes accountability. Some challenges were working with Java 1.4, a database without data integrity check support (a legacy

version of Sybase), and a programming model required by the bank based on stored procedures. I developed the frontend using JSP. I learned about technical management, and I solved infrastructure problems such as data access, storage and packaging and distribution of Java applications.

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

Globant (2009 - 2013)

My next job was for Globant, another HR consulting company. I worked as web developer for JWT, a media agency specializing in marketing and communication. The project consisted of a complete re-engineering of a content management system. The product was a content manager to organize digital content like documents, images and videos. It was designed to allow the agency to customize the application for different customers. The agency was able to re-brand the application and define storage and processing quota for its customers.

In this project I learned to work with a service-oriented programming model, since most of the application's responsibility was managed by the frontend. The backend was build using Spring MVC and Jawr for services, JackRabbit for content management, Hibernate to manage the domain model, and FFMpeg/ImageMagick to process videos and images. The view rendering used the freemarker template engine. In the frontend, I used jQuery for DOM, YahooUI for rich components, and underscore.js for utilities.

I had my first experience bootstraping an application and managing a development team in another project for JWT. The customer wanted to integrate agencies from all over the world in order to share their work and get to know them. We built a social network of marketing projects so agencies were able to present creative ideas from anywhere for a project created by another agency. The goal was to promote the interaction between agencies in order to build common knowledge and reduce redundancy and costs of content. My role in the project kick off was to estimate the effort, set up the infrastructure, and agree with the customer how to manage the project's follow-up and delivery.

After two years working for JWT, I started working for 55social, another Globant's customer. The challenge was the creation of a social media platform to allow companies manage content and marketing campaigns in social networks. Thanks to a small high-performance team the first beta was ready in four months. After two years of development, I left Globant and I continued working for 55social.

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

55Social (2013-2015)

55social was a digital marketing company with operations in Brasil. The product consisted of a content manager to create and publish marketing campaigns on Facebook, a community management module to manage multiple social networks accounts, and a metrics engine integrated with Facebook and Google Analytics to analyze the outcome of marketing campaigns.

I worked as developer frontend and backend in the content manager and the metrics engine, respectively. In the frontend the challenge was the generation of a customizable design environment to allow marketing agents building a Facebook campaign only by configuring a set of widgets. Regarding

the backend, the challenge was the creation of a metrics engine able to extract and process data to display different kind of graphs in order to allow customers analyze the outcome of marketing campaigns.

While working on 55social and Globant I was an interviewer and I prepared technical workshops and trainings about web development.

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

Despegar.com (since 2015)

Despegar.com is an online travel agency. I work in backend programming developing microservices.

The first two years I worked with flight selling. I had to rewrite the flight booking engine in Scala. Some challenges were learning the Scala programming language, the interoperability within the complex booking flow, and the optimization of the application in order to support the selling throughput.

I currently work in flights post-sales. I'm involved in the development of several applications to detect and process involuntary flight changes. Some challenges are processing asynchronous flow of involuntary changes (flight providers notifies involuntary changes asynchronously), the errors management and recovery, and the analysis of providers data (since data consistency from providers is eventual and it depends on airlines).

Technologies: GIT, Maven, Spring MVC, Java Spark Web, Cassandra, RabbitMQ, SBT, Java, Scala, Kotlin.

Free software

I have developed, maintained and collaborated in different free software projects for 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 solving 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)

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 they could send messages to the national legislatives without any kind of registration. The long-term goal is to transform this single campaign into a direct participation platform.

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

Argentine congress data importer

ogov-importer retrieves all bills and their votes from the Argentine National Congress since 2001 until nowadays, the list of current legislatives 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.

Technologies: Grunt, JavaScript (NodeJS), Cheerio

<u>Paperhub</u>

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.

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

<u>IRC client API</u>

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.

Technologies: Grunt, JavaScript (NodeJS), WebSockets

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

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