SANTIAGO BRAGAGNOLO

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BIOGRAPHIC DATA

Complete name	Santiago Pablo Bragagnolo
Birth date	16 november 1982
Nationalities	Argentinian, Italian
EU eligibility	YES

CONTACT

Skype	santiago.bragagnolo
Linkedin	linkedin.com/in/santiagobragagnolo/
Blog	knowledgeconvergence.wordpress.com
Github	github.com/sbragagnolo
SmalltalkHub	smalltalkhub.com/#!/ sbragagnolo

INRIA POSITION RELATED: BRIEF OF DOMAINS

Robotics	4 years
Internet of things	2 years
User experience	11 years
Gamification (Specific way of UX)	1 year
Software design, quality and maintenance	15 years

INRIA POSITION RELATED: BRIEF OF COMPETENCES

Languages	Pharo Smalltalk, Java, Javascript, Scala, C++
Technologies	Unix, ROS, SQL, NoSQL, REST, JSON, XML, Multiple-cores
Microcontroller programming	Arduino, RaspberryPi, ARM Cortex M3
Versioning tools	SVN, GIT, Mercurial
Continuous integration	Jenkins, Travis
Testing	TDD 10 years experience
Testing Tecnologies	SUnit, JUnit, Selenium, ScalaTest
Design Patterns	9 years experience
Working in multidisciplinary team	4 years

EXPERIENCE BRIEF

Software Industry experience	11 years
Research transference experience	4 years
Effective engineering study	3.5 years
Teaching programming on university	5 years

TECHNICAL STRENGTHS

Paradigms	Object Oriented, Functional
Languages	Pharo, Scala, Java, C/C++, Javascript
Application Middleware	Tomcat, JBoss, Google App Engine
Message Oriented Middleware	DDS, ROS
MVC Frameworks	Seaside, SpringMVC, Grails, Play2
Web Client Frameworks	Backbone.js, Underscore.js, JQuery
SQL Databases	MySQL, PostgreSQL, Oracle, SQLServer
NO-SQL Databases	MongoDB, BigTable, Db4o
Versioning	Metacello, Monticello, SVN, GIT
Building	Make, Maven, NDK
Processing Architectures	Multithreading, Multiprocesses, Real time
Software Architectures	REST, Service, Client & Server, Data Processing (ETL), Actors
Quality/Testing	SUnit, JUnit, Jenkins
IDEs	Pharo, Squeak, Dolphin, Eclipse, Netbeans
Operative system	Ubuntu/Debian Linux, CentOS Linux / Redhat enterprise

METHODOLOGY STRENGTHS

Working methodologies	Agile, KanBan, XP, Pair programming
Software design	Domain Driven Design
Quality assurance	Continuous Integration, Continuous Delivery
Development	Test driven development, Behaviour driven development, Lean development

LANGUAGES

Spanish	Native
English	Written and spoken fluent competence
French	Written and spoken medium competence

CURRENTLY WORKING ON

INRIA April 2015 - Present

Research Transference Engineer *Lille, France*

· Transference engineering is about applying research from different research teams into industrial domains.

· Actually I'am working with three teams

· FUN is a IOT Team. `https://www.inria.fr/en/teams/fun`

- Self-Organised Multi hop networks over a net of heterogeneous IOT nodes over IOT-lab `https://www.iot-lab.info`

- Working with RIOT.

- Development of the Demo "Firemen". A network of IOT sensing nodes recognise a fire case and sends a robot to solve the problem.

- Team contact Julien Vandaele - julien.vandaele@inria.fr

· NON-A is an adaptative control team. `https://www.inria.fr/en/teams/non-a`

- Testing and implementation of potential field path planning

- Testing and implementation of tangential path planning

- Testing and implementation of optimal minimal points path planning

- Zephyr. The intelligent table. A bed table that responds to voice commands.

- Robot-cop. A wanderer robot that sends alarms based on the recognition of potential intruders .

- Team contact Zheng Gang - gang.zheng@inria.fr
- RMOD is a team that researches about software evolution and maintenance. `https://www.inria.fr/en/teams/rmod`

  - Compiling Pharo smalltalk Virtual machine for android platform `https://github.com/pharo-project/pharo-vm`

  - TaskIT. Framework for dealing with concurrency and parallelism.

  - Scale. Framework for scripting with pharo.

  - Blockchain based application analysis.

  - Team contact Stephane Ducasse - stephane.ducasse@inria.fr
- Contact reference: Sylvain Karpf; sylvain.karpf@inria.fr

Spare time   October 2014 - Currently
Mako/Makros   *Lille, France*

- Component oriented framework for general programming and for quick prototyping and reproducibility of robotics behaviour
- Support for Pharo 3.0, 4.0 and 5.0.
- https://github.com/sbragagnolo/Mako
- https://github.com/sbragagnolo/Makros

Spare time   October 2014 - Currently
MetaDDS/SimpleDDS/ROSDDS   *Lille, France*

- Skeleton and canon implementation of a Data Delivery Service (publisher/subscriber) framework and it full ROS and Pharo smalltalk specific implementation. Based on ROS standard and OMG-DDS standard.
- Support for Pharo 3.0, 4.0 and 5.0.
- https://github.com/sbragagnolo/MetaDDS
- https://github.com/sbragagnolo/SimpleDDS
- https://github.com/sbragagnolo/ROSDDS

Spare time   Feburary 2013 - Currently
TaskIT   *Lille, France*

- Support for Pharo 3.0, 4.0 and 5.0.
- Framework for managing concurrency and parallel computations.
- Based in future/promises and it composition for synchronisation of processing.
- https://github.com/sbragagnolo/taskit

INDUSTRY AND RESEARCH EXPERIENCE

Ericsson   May 2014 - October 2014
Senior Java and C++ developer   *Malaga, Spain*

- Design and development of a troubleshooting solution for mobile telephone networks
- ERA (Ericsson ran analyzer) Project. C++ and Java based high-performance client, based on data analysis and complex visualizations over a GIS Map.
- TPS (Trace processor server) Project. Java high-performance server for trace processing (system that faces problems of teras of data) with some IronPython for processing text files, with part of processing over hadoop and hive.

· ODG (OSS Data gateway) Project. Project that analyze data from OSS servers. Also Java high-performance server.
· All of these project are highly Multithreaded and based on distributed processing.
· Most of the data processed is reduced and stored into the client mapping data from several servers with workflow processing. (Based in ETL pattern)
· TDD and Continuous delivery evangalizer.
· Working under Agile with Scrum methodology
· Contact reference: Jose Antonio Hurtado +34 670 42 66 01; joseantonio.hurtado@gmail.com

Ecole des mines de Douai   September 2012 - February 2014
Software Research Engineer, Robotics   *Douai, Nord-Pas-de-Calais*

· Design and development of the project RoboShop (http://car.mines-douai.fr/RoboShop), a robotic system for aiding persons to navigate into unknown spaces.
· My responsibilities are planning, engineering, development and technologic report writing for the projects RoboShop and PhaROS (http://car.mines-douai.fr/PhaROS).
· PhaROS is a framework for developing robot solutions for Pharo Smalltalk on the robotic middleware ROS. It implements a real time distributed architecture.
· The project RoboShop was presented in Picom and Vad Conext 2013 (Some content about http://car.mines-douai.fr/2013/11/roboshop-demo-16oct2013/)
· The project PhaROS is going to be presented in FOSDEM 2014, (https://fosdem.org/2014/) as PhaROS Towards Live Environments in Robotics in the Smalltalk devroom.
· From this position i also contribute with the project TaskIT (http://smalltalkhub.com/#!/ sbragagnolo/TaskIT), which is a project for managing parallelism and concurrence in a Pharo smalltalk environment.
· The used technologies for the robot side are: Pharo, ROS, Python and C++. For the graphical interface: Pharo, Seaside, Bootstrap, Javascript, html+css3, for iPad
· Contact reference: Noury Bouraqadi +33 6 27 07 48 42; noury.bouraqadi@mines-douai.fr

Fanwards (http://www.fanwards.com/)   November 2011 - August 2012
Software engineer, gamification   *Ciudad de Buenos Aires, Argentine*

· Design and implementation of the web application Fanwards, front and backend. Working with the CTO.
· Using for front end heavy weight clients based on javascript technologies such as Backbone.js, jquery, underscore.js , mustache and for the view HTML5 and CSS3.
· Using for the backend a Google App Engine (GAE) Server with Scala & Java, Objectify for the mapping between objects and google's BigTable, Spring MVC and RestFul frameworks for routing and dispatching of exposed and scheduled behaviours.Finally twitter4j and facebookRest for interacting with social networks.
· From this position i have developed: a full intelligent single-page client based on javascript, a small functional library for javascript implementing some of the common haskell features (partial application, curryfication and function compositions), really useful abstractions for AJAX request processing, also developed a social network crawler for analysing users comments for branding (with heuristics to analyse the meaning of each comment).
· From this position i also participate not just in software design, planning and architecture but also in the gamification process of the application.
· During all the development of the application we used Scala BDD and TDD techniques with great success.
· Crossing data for brand reports with Map reduce.
· You can watch the most important part of the implementation in the following example `https://www.facebook.com/pages/Melee-Island-Inc/252598398140724?id=252598398140724&sk=app_232320516837452`

· Contact reference: Claudio Fernandez claudiof@gmail.com

Aufiero Informatica
Software architect, designer & developer

March 2011 - November 2011
Ciudad de Buenos Aires, Argentine

· Project manager in charge of a 4 persons team.
· Reseller/Partner management system based on Groovy on Grails technology and communicating to software legacy done in PHP.
· Mail campaign web system for internal usage (For AVG campaigns). Done in Groovy and Grails / Jasper reports
· Email send system multi-engine, auto-deployable with load balance and mail tracking. Done in Groovy and Java, using Apache Email.
· Single sign on system for our different platforms - Done in Groove and grails.
· Contact Reference: Osvaldo Aufiero osvaldo@aufiero.com.ar

Buscouniversidad .com
Developer & system designer

January 2011 - March - 2011
Ciudad de Buenos Aires, Argentine

· Designing of Data base structure, SQL queries.
· Design and development of the directory system (such as OLX, Craiglists, etc, but specific for universities)
· Based on PHP with Zend framework, sphinx and Javascript with JQuery. And in the development of processing tools
· Design and development of a processing based on patterns for recognising rejects and angry people (python);
· Design and development of an easy code generator for Zend framework
· Contact Reference: Pablo Morales pablofmorales@gmail.com

Aufiero Informatica
Software designer & developer - Project manager

March 2007 - December 2010
Ciudad de Buenos Aires, Argentine

· Designer and developer of an Accountant management system - Java, Flex 3.1 JBoss
· Maintainer, developer and DBA of an Editorial integral management system (stock, accounting, finances, sells, shopping, etc) - visual basic 6.0 / sql server / Crystal reports.
· Designer and developer of ETL pattern for making up a small datawarehouse for sales analysis.
· Designer and developer - Classified ads management system - Net Framework 3.0 C# Nhibernate Windows form
· Software designer, developer and functional analysis - Billing online system - PHP, CakePHP, Javascript jquery.
· Software designer, developer - Electronic Invoice system (Based on the local taxes system) - Java, Groovy and Grails / jasper reports.
· Contact Reference: Osvaldo Aufiero osvaldo@aufiero.com.ar

MSA
DBA Oracle 9i & Postgres SQL

2006
Ciudad de Buenos Aires, Argentine

· DBA of three productive databases related with ticket system (kind of ticketek but with less stress)
· My tasks were Data base monitoring, Backup, SQL Security, Database and query tuning for the productive systems (Oracle 9i) and making up configurations for eventual projects (Usually Postgres SQL)
· Parallely i had some small responsibilities in eventual projects

Research for decision
Developer

2003 - 2005
Ciudad de Buenos Aires, Argentine

· Design and development of polls in eole/saxophone (language and poll system).
· Servers, machines and network maintenance.

Freelance   2002 - 2009
Developer, Designer, Architect, DBA & Client management   *Ciudad de Buenos Aires, Argentine*

· This are the projects i have developed as independent, several of them still in usage, and I maintained almost them for one to two years.
· November 2002 to July 2003 - Nutritional preparations management system for a Parenteral Laboratory (UNANUT) - Visual Basic & Microsoft Access (Supported until 2005). Contact Reference: Lorena Fazio faziolorena@yahoo.com.ar
· June 2003 to August 2003 - Stock management system for a box factory - Visual Basic & Microsoft Access (Supported until 2004). Contact Reference: Gerardo Grimaldi grimaldi.gerardo@gmail.com
· July 2009 to March 2010 - Certification and courses management system SFAP - PHP (http://www.facpce.org.ar/) (Supported until 2011). Contact Reference: Christian Milokanovich milo76@gmail.com

EXPERIENCE IN OPEN SOURCE - COMMUNITY PROJECTS

On my own   Mars - May 2014
Making work Scala + Play + MongoDB   *Malaga*

· Putting together some existant technology for a project on my own
· Fully developed with Scala and Play. It has some java dependancies (Jackson for JSon marshalling)
· https://github.com/sbragagnolo/mongodb

On my own   June - August 2014
Social secure plugin for Play running on top of MongoDB   *Malaga*

· Social secure backend implementation for running on mongoDB
· Fully developed with Scala and Play.
· https://github.com/sbragagnolo/SocialSecurePlayMongo

On my own   Mars - August 2014
Android   *Malaga*

· Android application for knowing where to go to play football.
· https://github.com/sbragagnolo/Where

Google summer of code   May 2012 - September 2012
Type inference on dynamic languages   *Ciudad de Buenos Aires, Argentine*

· Design, development, planning and research in the topic of Concrete type inference.
· Mentored by Nicolas Passerini (npasserini@gmail.com).
· The proposal is registered http://gsoc2012.esug.org/projects/type-inference
· From this project i have implemented a concrete type inference system for Pharo Smalltalk 1.4, a graph of methods to be executed as response of the analysis of a given expression, and an object oriented logger.
· I also took the work of blogging all the work progress and design decisions in a blog. This project was presented in the conference ESUG 2012 - Gent - (http://www.esug.org/wiki/pier/Conferences/2012)
· Site - http://concretetypeinference.blogspot.fr/.
· Concrete type inferencer and the call graph analyser (Kwisatz Haderach) - http://ss3.gemstone.com/ss/ConcreteTy
· Paule le poulpe; Object oriented Logger - http://smalltalkhub.com/mc/sbragagnolo/PLP/main

ESUG financed Project   May 2011 - September 2011
Developer in DBXTalk   *Ciudad de Buenos Aires, Argentine*

· Design and implementation of the automatic binding and scaffolding for DBXTalk (ex SqueakDBX) and Glorp.

· DBXTalk (http://dbxtalk.smallworks.com.ar/) is a bridge that gives support for the database systems to mainstream Squeak and Pharo smalltalk.

· This project with the porting of Glorp to Pharo (by Guillermo Polito) were presented in ESUG 2011 - Edimburgh (http://www.esug.org/wiki/pier/Conferences/2011)

· Contact Reference: Guillermo Polito guillermopolito@gmail.com

FACPCE financed Project - Used for SFAP   2009
Developer in Cornucopia framework   *Ciudad de Buenos Aires, Argentine*

· PHP Cornucopia. Is an already obsolete full stack framework. It provides:

- Collections

- Simple ORM configurable by metadata

- Simple dependency injector

- HTML reification for composing and HTML generation

- Javascript generation by metadata (Requirements, etc)

- Request reification as object

- Session reification as object

· Check it out from: https://github.com/sbragagnolo/cornucopia
· Contact Reference: Christian Milokanovich milo76@gmail.com

On my own for an university topic   2007
Developer in C Objects framework   *Ciudad de Buenos Aires, Argentine*

· C Objects. Is a framework to provide several object oriented programming features to C. It provides:

- Collections (Dictionary, List)

- Strings

- Server, with node objects for managing requests

- Automatons for simple language interpretation

- Threads reification

- Mutex and Conditional reifications

- Error management (managed by signals, giving the change to register error handlers and to raise errors)

- Memory management.

· Checkit out from: https://github.com/sbragagnolo/c-objetos
· Contact Reference: nicolassouto@gmail.com

TEACHING EXPERIENCE

Universidad Tecnologica Nacional (UTN)   March 2007 - July 2012
Adhonorem teaching assistant at Advanced programming techniques   *Ciudad de Buenos Aires, Argentine*

· Teaching the next concepts, techniques and tools

- Object oriented programming

- – Patterns

  – Methodologies TDD/BDD, DDD, Agile

  – Re-factors

  – Meta-programming

- Basic architectures

- Technologies

  – Maven

  – IDEs - Eclipse, Idea, Netbeans

  – JUnit, ScalaTest

  – SVN & GIT

- Dynamic languages

  – Scala

  – Python

  – Smalltalk

  – Self

- Modern applied concepts

  – Traits and Mixins

  – Lambdas / anonymous functions

· Contact Reference: npasserini@gmail.com

Universidad Tecnologica Nacional (UTN)   March 2007 - December 2011
Adhonorem teaching assistant at Programming paradigms   *Ciudad de Buenos Aires, Argentine*

· Teaching the next concepts, techniques and tools

- Object oriented paradigm

  – Pharo Smalltalk

- Functional oriented paradigm

  – GHC

  – WinHugs

- Logical oriented paradigm

  – Swi prolog

· Contact Reference: carlombardi@gmail.com

Fundacion Proydesa   March 2006 - November 2007
Oracle DBA Instructor   *Ciudad de Buenos Aires, Argentine*

· In this foundation i worked as instructor of three of the four basic modules of Oracle for Database administration

· SQL (Module 1)

· Engine Architecture (Module 2)

· Tuning (Module 4)

· I also participate as instructor in the instruction of new instructors for modules 1 and 2.

EDUCATION

Universidad Tecnologica Nacional (UTN) - Ciudad de Buenos Aires - Argentine *January 2004 - Aborted on 2011 because of personal problems, having papers to proof 7 semesters of career of 10*
Software Engineer

Ing. Otto Krause - Ciudad de Buenos Aires - Argentina *December 2001*
Technic in computation