Nathan Bijnens

INTRODUCTION

Name	**Nathan Bijnens**
Address	On request
	9042 Ghent
	Belgium
E-mail	nathan@nathan.gs
Website	nathan.gs
GitHub	github.com/nathan-gs
Twitter	@nathan_gs
LinkedIn	linkedin.com/in/nbijnens
Skype	nathan_gs

I am Nathan Bijnens, a developer with a passion for great code, the web and Big Data. I am interested in programming and system administration, especially where they meet, from scaling platforms to designing the architecture of new and existing products and everything in between.

I am focused on data analysis and building Big Data Applications. Using Hadoop, in combination with Hadoop Pig, Hive and Cascading. I follow the rise of real-time big data closely, actively developing applications on top of Storm. And designing Lambda-like architectures. The infrastructure side interests me as well, and I am learning more about Business Intelligence and visualizing big data. I advise on Big Data Strategies and evangelise Big Data to clients and at conferences.

I have a lot of experience with PHP, Java and other related technologies like MySQL, nosql, memcached, nginx and a lot more. I strongly believe in unit tests and design patterns, to write precise and easy maintainable code that works.

I am a passionate linux system engineer, follower of the devops movement. Using Puppet and Ganglia to automate and monitor deployments.

I am inquisitive, I love learning about new things and improving what I know. I am very passionate about what I do, and I have strong analytical skills.

EXPERIENCE

As from April 2012 I work for **DataCrunchers**, as a **Hadoop and Big Data Consultant**. DataCrunchers is the leading Belgian consultancy firm around everything Big Data. I co-develop on our internal Semantic Analysis Engine on top of Storm, in Java, I co-presented our Hadoop Ecosystem course, I created a new website using Drupal and I am responsible for our Microsoft Big Data partnership.
I have been working for the following clients: Technicolor, Flemish Government, AWV (Macq), Octopin, HSHMRK & Ewals Intermodal.

At **Devoxx '13**, the biggest European Java conference, I presented **A real-time architecture using Hadoop and Storm**.

At **JAX London '13**, a Java Enterprise and Big Data conference, I presented **A real-time architecture using Hadoop and Storm**.

At the **SQLUser Group Belgium** meetup of February 2013 I presented about **Big Data, Hadoop and HDInsight**, together with Wesley Backelant of Microsoft Belgium.

At the 2013 edition of the **FOSDEM NoSqlRoom**, an open source conference, I gave a presentation about **A real-time architecture using Hadoop & Storm**, and has been viewed over 9500 times.

At the 2013 **Big Data & Security Conference** of **LSEC**, I gave a presentation about **A Vision on Data**.

Since March 2007 I am the **Consultant, Managing Director and founder** of **Servs** BVBA; mainly active as an IT consultant in the field of Big Data & hadoop, web applications (PHP, sql, scalability, best practices, …), devops & linux system administration and hosting applications.

From March 2011 till April 2012 I worked for **iController**, as **Lead Application and Warehouse Developer**. We build a credit management web application, written in PHP. I managed a small group of developers, took the lead on everything technical and coordinated with the directors, partners and clients.
My job involved lots of PHP, refactoring, performance tuning, system engineering and bits of data analysis.

From April till August 2011 I worked as a consultant for **Truvo**, the Belgian yellow pages, doing a **hadoop deduplication** job. I used Hadoop & Hadoop Pig, wrote custom UDFs in Java for Ngram matching and solved performance issues. At first Amazon Elastic MapReduce was used, later I setup a Hadoop cluster.

At the 2011 edition of the **FOSDEM DataDevRoom**, an open source conference, I gave a presentation about **Hadoop Pig: MapReduce the easy way**, it was featured on the front page of slideshare.net (http://www.slideshare.net/nathan_gs/hadoop-pig-mapreduce-the-easy-way) and has been viewed over 13000 times.

From September 2010 till February 2011 I was employed at **Netlog** as a **Warehouse and Web Developer**, creating an analytical warehouse based on Hbase. I also created large parts of the processing infrastructure using Hadoop and Hadoop Pig. I also advised on new technologies, GIT migration, best practices & unit tests. Netlog is a social community network, with over 70 million members, mainly active in Europe and the Arabic world.

From October 2009 to August 2010 I started working at **iController**, a small SME in Ghent, as **web application developer**. I developed a new, greatly improved debtor & credit management web application. We used the Symfony framework as a starting point to create a stable and easy to maintain application.

In 2009 I was active as a consultant to a Dutch services organization. The assignment mainly consisted of **creating a link between existing systems and a new website**.

From 2008 till present I perform various **short term consultancy** tasks commissioned by **Sinergio** . For a **semi government organisation** I set up a new tomcat server and did a general check up on their Linux servers. For another company I configured an ASP.Net application and installed an IIS server. For **Sio Hosting** (Formerly Sinergio Hosting) I planned and executed the move from traditional servers to a virtualized xen cluster. I also check the integrity and security of their hosting platform on a regular basis. I advise them on strategic planning.

During 2004 – 2010 I advised on and co-developed for **4levels** several websites, backend systems and web applications.

During my secondary education I created a **PHP CMS**, with features as native PHP templates, module in module support (recursion) following a very basic MVC pattern. It was used and expanded by two web agencies to create over 30 websites.

SKILLS

I am very interested in **Big Data**, from the processing and storage of large volumes, to real-time stream processing, and machine learning. I read, tweet, and try out as much as I can about new Big Data technologies, like Spark and Storm, as well as more established technologies like Hadoop, MapReduce and learning as much as I can in the process. I program in Cascading, Hadoop Pig Latin and write queries in Hive regularly. Also the setup, administration and monitoring of Hadoop, Hbase, Storm & Zookeeper clusters interests me a lot.

Hadoop & Big Data related skills:

- Using & administrating Hadoop clusters, including Storm, ElasticSearch, Cassandra, Hbase and Zookeeper.
  - Deploying Hadoop on Azure, Amazon & Softlayer.
  - Using Amazon Elastic MapReduce.
  - Whirr or Chef (fog) to deploy Hadoop to Amazon EC2.
- Query the data with Cascading, Hadoop Pig & Hive.
- Write Pig UDFs in Java.
- Developing solutions for real-time Big Data using Storm and Kafka.
- Combining batch and real-time technologies to create a Lambda architecture (of Nathan Marz), that is resilient to failure, scalable and fast.

Next to programming I have always been passionate about **Linux** and open source. I have used over the last 10 years several distributions from Debian & Ubuntu, CentOS over Gentoo to Linux From Scratch. I have setup countless servers from virtualized (Xen, VirtualBox, libvirt, Vagrant) to almost bare metal web servers. I administrated Apache, Nginx servers, configured and tuned MySQL and played with Postfix extensively. As well configured and monitored Cassandra, Redis, Voldemort, ElasticSearch, Hbase

I am using **Java**, mostly using Spring, Maven and Jersey in combination with the JavaScript MVC framework AngularJS.

- Developing a Java EE application, with Glassfish, using JPA with Eclipselink.
- Creating Threaded servers, using Thrift.
- Autowiring & Dependency Injection using Spring.
- Consuming the Twitter & LinkedIn APIs, using OAuth.
- Creating a REST and SOAP based services, using Jersey or JAX-WS.
- Using the common libraries like Guava, Apache Commons, Joda Time & slf4j.
- Unit testing using JUnit and Mockito.

I am interested in **Functional Programming**, mostly looking at Clojure. Especially functional programming in relation to Big Data has my focus.

I have used **PHP** for over 10 years, from namespaces, closures over Iterators to PDO, as well as some more exotic multibyte & UTF8 functions, xml & xslt and pecl extensions. The last five years I've been using PHP in a combination with the symfony & Symfony2 frameworks. I use PHPUnit extensively, integrated with Jenkins, to assure that what I write works and keeps on working.

Some PHP related skills:

- MySQL, but also various other databases, like Oracle, MSSQL, Sybase, ODBC using plain PDO, the Doctrine & Doctrine2 ORM and Propel.
- Memcached & Redis.
- html5, CSS & jQuery
- Creating a Drupal site, using Bootstrap and deploying on Windows Azure.
- GIT, Mercurial & SVN.

I am setting my first steps into the **Python** world. I used Python to create a Ganglia proxy and aggregator, I

clusters.

I am following the DevOps movement. I am both using Puppet and Chef to automate and Ganglia to monitor critical infrastructure. I have open sourced and contributed to several Puppet modules.

In this context I also took my first steps with Ruby.

Developing a Continuous Integration strategy, with related tools like Jenkins.

I follow and try out with great interest Cloud related techniques and technologies, in all its forms: IaaS, PaaS, MaaS, … I have used as test or in production Amazon S3, Amazon EC2, Amazon MapReduce, Amazon IAM, Google BigQuery2 (private beta tester), Windows Azure Platform and Hadoop on Azure (private beta tester) and Softlayer.

consumed REST and SOAP API's, wrote Threaded applications and deployed to the Google App Engine.

Some basic knowledge, but willing to improve:
- Graph databases: Neo4J, HyperGraphDB & Titan.
- Various NoSQL data stores, like MongoDB, Voldemort, riak, …
- Ruby, Clojure and Scala.
- Scrum, Extreme Programming
- Security & penetration testing.

Languages

Dutch Mother tongue

English Very fluent

Other skills

In possession of a drivers license.

EDUCATION

IBM Big Data Fundamentals Technical Mastery (N32)
IBM | 000-28363001 | January 2013

IBM InfoSphere BigInsights (Hadoop & Big Data) Technical Professional
IBM | 000-28146057 | October 2012

Period 2005 - 2007

Institute University of Antwerp

Program Social-Economic Sciences

Period 1999 - 2005

Institute Hibernia Steinerschool in Antwerp

Program ASO, Higher Secondary education

Achieved in 2005