

# ir. Bert Raeymaekers

**Family / Budgerigar / Pythonista / Volleyball / Tim**

*Erps-Kwerps*  
*firstname DOT*  
*lastname AT*  
*schilduil DOT org*

° 7 July 1974 in  
Antwerp, Belgium  
Nationality: Belgian

[LinkId](#)  
[Stackoverflow](#)  
[Twitter](#) [GitHub](#)

That look interesting, let me jump into it:

- A subscription to 'Witte Spreeuwen' about keeping birds. That quickly led to breeding with a pair of budgerigars, next a flight, more species and more flights. And up until now I breed show budgerigars.
- A computer class first year of middle school by father Leo leads to nagging for my own 8080 computer. With the manual next to me I started writing BASIC programs. My dad found I should learn a more modern language, so with the manual and a short introduction I dived into Pascal.

And with that my two biggest passions were set (after the family, but that would come later).

When it was time to decide what to study, it was a balance between these two passions. Eventually I chose agricultural and applied biological sciences. In hindsight that was the right choice: a wider education and IT would later turn out to be inevitable. Genetics was the big interest so I chose stockbreeding as my major and minored in cellular and genetic biotechnology. As master thesis it was natural to do something with animal genetics: simulating breeding strategies for rare Belgian breeds of sheep.

During my studies I like statistics so I took an extra year studying it. After my registration they were looking for two part-time java developers to work on educational statistical applets. The first step towards a computer job was made. The following years as an IT consultant gave me the opportunity to get familiar with its different aspects.

The operations side drew me in and fortunately I found a steady job that better fitted with my starting family. Here I could gain a deep understanding of the IBM WebSphere Application Server (WAS). After some years I switched to a job where I could expand my view more.

As a hobby I was playing volleyball and so I went for a coaching

degree. At home I was starting again on the next iteration of my bird administration software. This time I started writing it in Python. I came across it as the WAS admin scripting language. Python soon became my favourite programming language. Through articles, videos and podcasts I dived into it. Also on the job I tried to use Python as much as I could: from scripts to a configuration framework.

Podcasts and the internet in general are great to discover new software and libraries: Like MongoDB, which as document database seems to be the best fit for my 'bird administration' software. So on my free evenings I dived deeper into Python, Pytest, MongoDB, ... and what the possibilities are for deploying it on the cloud. Python also became, thanks to SciPy and the likes, also the language for data science. That was a nice callback to my statistics studies and an incentive to look into the machine learning methods.

In the meantime something called a 'Raspberry Pi' came on my radar and where I did dare, as a kid, connect the expensive PC to the physical world, this was no longer blocking. So in the birdroom humidity, dust, ... got measured and put into graphs. Also Raspberry Pi's became a bit my private cloud for monitoring, backup, twitterbots and so on. Hopefully I can get to setting up a Pi Camera with OpenCV to monitor the breeding boxes.

At the job I got the chance to dive into new technologies like ElasticSearch, Ansible and Kafka. Especially Ansible was such an advantage that I started using it as well for setting up my personal Pi's and test virtual/cloud machines.

Challenging projects give me satisfaction like for instance that time we did a full tear down and reinstall of all the major web applications of the company in under 24 hours. My last big project was the Datahub project that is based on MapR and ScaledRisk/Hbase with a Python ETL pipeline.

## **Job experience**

- ***Vanaf SEP 2012 Application Engineer - BNP Paribas Asset Management***

Responsibilities/Projects:

- Automate installation, configuration and management of different applications with Ansible/Python/TFS

GIT/Artifactory/Xymon/Nagios:

- Ansible Tower: setup design, configuration and management
- Datahub project (devops) - infrastructuur team (MapR, ScaledRisk/Hbase/Hadoop, ...) and Python ETL pipeline: installation, configuration and documention
- Kafka management and integration with ELK
- ELK (Elasticsearch/Logstash/Kibana/Filebeat): installation, configuration and management
- Wordpress project (devops): installation, configuration and management
- Several user applications applicaties (Windows/Solaris /Linux): installing, upgrading, documenting, monitor, disaster recovery, provisioning, resource management, ...
- Subversion server: installation, configuration and management
- Citrix admin (XenApp 6/7)
- WebSphere Specialist (IBM WebSphere Application Server)

- **NOV 2006 - AUG 2012 Systeem Specialist - KBC Global Services**

Automate installations and configurations of web application servers (IBM WebSphere Application Server, Internet Information Services, JBoss EWS, Apache Tomcat, Apache Http Server

- Creating frameworks for automatic configuration of the middleware solutions (Python/Jython)
- Writing and maintaining procedures and documentation
- Assist several customers with middleware topologies, taking into account things like volume, high availability and disaster recovery
- Troubleshooting (pre-production and production) with logging and dynaTrace instrumentation
- Tuning and assisting with performance tests
- Creating and giving trainings
- Inform the organization of changes and new services

- **FEB 2001 - OCT 2006** Technical consultant for Adeliar Benelux

Projects:

- *Latest*  
**NatStar**: Aanvraag Systeem Kredieten
- *NOV 2004 - SEP 2005*  
**WebSphere Administration** at ING Belgium:  
WebSphere versions 4.0 and 5.1 clusters on Windows/Solaris/AIX; Automated installation and administration for WebSphere 5.1 using jacl, java code

- and/or wsadmin. Troubleshooting applications with HeapAnalyser and ThreadAnalyzer.
- *SEP 2004 - OCT 2004; APR 2004*  
Internal **Java** project: Timeregistration and project follow up application using struts and hibernate. The application runs on WebSphere 5/DB2 under Windows with a testenvironment on Tomcat/MySQL. The development environment was Eclipse and WSAD.
  - *AUG 2004*  
**NatStart** at SNS bank (NL): Adding Account Manager module to the "Bemiddelaars Informatie Systeem" client/server application.
  - *JUN 2004 - JUL 2004*  
**Java** project at Neckermann Shopping (NL): Switching the customer data part of the automatic ordering system (Ecombo) from Oracle (on AIX) to IDMS (using eXadas) on mainframe. The application runs under WebSphere 5 on AIX and uses EJB's to interface with the web frontend.
  - *MAY 2004*  
**NatStart** at SNS bank (NL): Changing the risk model on the "Consumptief Krediet Kantoren" client/server application.
  - *MAR 2001 - MAR 2004*  
Parts II project at Toyota Motor Europe Marketing and Engineering (TMME). Parts II is a Windows/Mainframe /CICS/DB2 written in **NatStar** and cobol for the European stock management and ordering system of spare parts. Started as online (NatStar) developer in the Maintenance team. Gradually became backup for the online build manager. Since December 2001, team leader for the online team responsible for assigning work to the team members, motivating them, making plannings, making technical analyses and guard the quality of the delivered work.
  - *JUN 2000 - JAN 2001* Full-time scientific personnel at the Centrum voor Landbouweconomie (CLE) [Center for Agricultural Economics], Belgian ministry of agriculture; *Publication*: "Technische en economische resultaten van de varkenshouderij op bedrijven uit het CLE-boekhoudnet (Boekjaar 1998-1999)" [Technical en economical results of pig keeping on farms from the CLE's accountancy net (year 1998-1999)]
  - *NOV 1998 - APR 2000* Part-time (40%) scientific collaborator at the [University Centre of Statistics \(U.C.S.\)](#), K.U.Leuven, Belgium; VESTAC project: Visualization of and Experimentation with STATistical Concepts (Education

Council K.U.Leuven); Writing web applets.

- **25 NOV 1999 - 25 DEC 1999** Extra part-time (+40%) scientific collaborator at the [University Centre of Statistics \(U.C.S.\)](#), K.U.Leuven, Belgium; Statistical analyses.

## Education & Certification

- **2020** Elastic: *Kibana Data and Ops Analyst* course.
- **2020** 365 Data Science: *Advanced Statistical Methods in Python* course.
- **2020** 365 Data Science: *SQL + Tableau* course.
- **2020** 365 Data Science: *Tableau* course.
- **2019** Cloudera: *HBase* training.
- **2018** RedHat: *DO407: Automation with Ansible* course.
- **2018** MongoDB University: *M102: MongoDB for DBAs* ([certificate](#))
- **2018** MongoDB University: *M310: MongoDB Security* ([certificate](#))
- **2018** MongoDB University: *M201: MongoDB Performance* ([certificate](#))
- **2018** MongoDB University: *M103: Basic Cluster Administration* ([certificate](#))
- **2018** MongoDB University: *M001: Mongo Basics* ([certificate](#))
- **2017** LFS151.x: *Introduction to Cloud Infrastructure Technologies* ([edX certificate](#))
- **2017** WEBSECx: *Web Security Fundamentals* ([edX certificate](#))
- **2017** Elastic: *X-pack Machine Learning* presentation.
- **2016** *Getting Started with PowerShell 3.0 Jump Start*
- **2015** DAT203x: *Data Science and Machine Learning Essentials* ([edX certificate](#))
- **2013** ITIL certified
- **2011** dynaTrace certified
- **2010** Novell Certified Linux Administrator (CLA)
- **2008** Certificate from the University of Ghent: *ICT Software & Data processing - Part I: The hardware-software interface*
- **2006** Linux Professional Institute certified: *Junior Level Administration (LPIC-1)* [LPI ID: LPI000100756]
- **2005** BLOSO certified volleyball trainer level C (Volleybal Initiator)

- **2004** IBM Certified Associate Developer WebSphere Studio V5.0
- **1998-2000** Master of statistics at the [University Centre of Statistics \(U.C.S.\)](#), K.U.Leuven, Belgium; English program; Paper: "Risk factors in Sudden Infant Death Syndrome (SIDS)"; Graduated magna cum laude.
- **1993-1998** Master of engineering at the [faculty of agricultural and applied biological sciences](#), K.U.Leuven; Major in stockbreeding, minor cellular and genetic biotechnology; Paper: "Fokstrategieën voor de zeldzame Belgische schapenrassen." [Breeding strategies for the Belgian rare breeds of sheep]; Graduated cum laude.
- **1986-1993** ASO mathematics/sciences, Sint-Albertuscollege Haasrode, Heverlee, Belgium
- **Extra Courses**
  - 2012, Citrix XenApp
  - 2004, Java Components & Frameworks (Log4j, Apache Commons, JSP/Servlet, Struts, Spring, IoC, Hibernate, ...)
  - 2003, AUGEO 5: project and resource management
  - 2002, Portals Training: Mediapps NetPortal, Weblogic and WebSphere portal
  - 2002, Unified Process Fundamentals training
  - 2002, Introduction to AdvancedWeb, NetPortal and OpenMarket
  - 2002, Introduction to UML
  - 2001, Advanced EJB and WebSphere programming at IBM
  - 2001, NatStar course at Cognicase Benelux
  - 1998, Java course at K.U.Leuven

## IT skills

### Automate & Document

- The 'desired state' model of Ansible I find a strong principle. Ansible Tower is a nice layer around it taking care of structure and authorizations. Writing playbooks, roles and modules (Python) is satisfying.
- Documenting setups and procedures in different setups: wiki, documents, presentations, ... for

handover to myself, colleagues, an offshore team or consumers of our assets.

- Automizing installations: from a simple single script to automate the boring stuff to an entire framework.
- Creating pipelines for deployment package creation.
- Pytest is a very well thought out testing framework, not only for Python.
- Building monitoring scripts: is it up?, will the certificate expire soon?, is it healthy?, is it responsive?, unusual behaviour?, ...
- Spreading knowledge by giving presentations and courses.
- Raspberry Pi projects for monitoring the environment (light, dust, ...), backups and monitoring.
- Automatic backups of documents from Windows/Linux/macOS end user machines.
- Experimenting with infrastructure as code with vagrant on virtual machines or on the cloud (DigitalOcean).

## **Technology Environments**

- Xymon lightweight monitoring.
- Install&Conf: Elasticsearch / Logstash / Kibana stack with X-pack with authentication on AD.
- Raspberry Pi
- Install&Conf: Subversion with authentication on AD.
- Multitier application: Windows - CICS - Mainframe - DB2 (NatStar)
- Multitier application: Windows - TP - Windows - Sybase (NatStar)
- Backend application: EJB - WebSphere - Oracle/IDMS (java)
- Web sites & web applications
  - using static site generators
  - using Bootstrap
  - using plain html/javascript
  - using php and MySQL
  - using JSP/Servlets/Struts/Hibernate /MySQL/DB2

## **Programming Languages & Development Tools**

- Java (POJO, JEE, Hibernate)
- jacl (Java TCL)
- Python (3) programming/scripting (shelve, sqlite, PonyORM, pymongo, http server, tkinter, Xymon, ...) with Pytest and coverage, jython
- Perl
- PHP
- NCL (NatStar/NatWeb)
- Visual Basic, GWBasic
- Basic C
- Shell scripting (ksh, bash, dos)
- (Turbo) Pascal
- HTML, JavaScript
- Versioning systems: git, CVS, Subversion, ClearCase, NSAConfig

## Languages

- Dutch as native language
- Excellent in English
- Very good in understanding written and spoken French, moderate in writing, good in speaking
- Good in understanding written and spoken German, far less in writing and speaking

## Hobbies & Interests

- Volleyball player; Until season 2004/2005 trainer of the amateur team CME. Season 2007-2010 trainer of the ladies recreational team of Vollek.
- Until 2004 football (soccer) player at VK Heuvel-lo
- Since 1992 active in the JeKa. JeKa is aimed at the youth (age 12-18) of the local community.
- Was an active member of Verzetje, the pastoral youth team of



the federation Herent.

- Participant and collaborator at Tentenkamp from 1999 until 2006.
- Member of the Belgian Budgerigar Club ([Belgische Grasparkieten Club](#)).
- Member of the Belgian Foundation Living Heritage ([Steunpunt Levend Erfgoed](#)).