

## ***Job positions***

- Technical Team lead
- Senior Java/JEE Developer
- Java/JEE Coach
- Architect

## ***Skills***

- Java and JEE
- Software Architecture
- Object Oriented Analysis and Design
- Coaching as well as technical team leading
- Languages:
  - Dutch: mother tongue
  - English: good
  - French: good

## ***Diploma***

Master in Computer Science, [University of Ghent](#) 1995

## ***Strong interest in***

- Architecture (SOA, SaaS, Object Orientation, Design Patterns, Component Architectures)
- Team organization (SCRUM, XP, quality enforcement through code reviews)
- Integration and Service oriented technologies (EAI, ESB)
- PKI and Security technologies
- Geographic Information Systems (GIS)
- Business Intelligence (ETL, reporting tools)

## ***Contact details***

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## **Java Team Lead for DB Belgium**

12/2015 till 11/2016

Started as a regular Java Developer bringing more experience in the MyBank (=DB's mobile banking app) project on EJB 3, Spring, Messaging, AngularJS and Hibernate. Dived into all details of VASCO's iKey server (and the related SDK) managing both real DigiPasses as well as the 'soft token' version allowing smartphones as a replacement for dedicated DigiPass client devices.

Promoted to team lead taking over many of the roles the solution architect assumed up till then, mainly by coaching and pro-actively planning Java developments.

Investigated different automated test techniques and planned migration paths removing technical debt from the existing code bases.

Assisted in the migration of the development teams from SubVersion to Git (using Stash initially, then BitBucket finally integrated with the other Atlassian tools).

Intro into Tibco tools and frameworks used at DB in order to come to a local development environment for all developers without influencing the one common staging environment on which more then 20 colleagues all depend to do their work.

Joined the agile OLB2 (meant to replace the Online Banking) when it started and learned all about the BackBase offering, specializing in the backend development based on Camel.

Cleaned up the source base of a common backend component (wrapping the iKey server, maintaining profile information and logs for the DB call centers) before starting to lead a team implementing extensions on it.

Put a new development environment in place allowing developers to quickly be productive in the backend team and eliminate most of the infrastructure dependencies while developing/testing.

Designed a way to have a solid set of automated tests that run independently of DB infrastructure and assisted in the implementation of test scenarios by testers and developers.

Helped the development teams to grow in applying Agile practises using the different Atlassian tools made available by DB (Confluence, JIRA, BitBucket, Crucible, FishEye).

Proud member of the OLB2 team that beat time constraints and DB infrastructural/organisational issues by succeeding to deliver a (+50% completely) new Internet Banking solution, not depending on EOL HW and catching up with today's UX design.

## **Application Architect for Smals**

8/2015 till 9/2015

Application Architect starting a new project in the eHealth ecosystem.

Besides helping detailing the requirements and their priorities, designed a solution that can be deployed in both their classic WebLogic environment as well as the future OpenShift v3 (the RedHat/JBoss PAAS offering).

Setup a development environment on the current OpenShift v2 infrastructure (awaiting the final release of OpenShift v3 within Smals).

**Technical lead and Senior Java developer for [Toyota](#)** 3/2015 till 8/2015

Senior/Lead Java developer in a team with a big SCRUM focus, initially brought in to migrate a project that still used SQLJ technology (IBM specific technology).  
Created a local development environment in supporting the quest for a correct version of the code bases corresponding a live product for which no documentation was maintained.

Worked for other, more recent projects hosted in the cloud as PAAS (Heroku) supporting other EMEA wide end users.

Assisted in the redesign of the process to create/update/distribute technical documentation (both for Toyota/Lexus specific and independent car service centers)  
Made designs/planning for projects with the Heroku stack (using MongoDB), both with a JEE stack as well as a NodeJS backend.

**Java and SOA expert for [M-Team](#)** 9/2014 till 12/2014

Java and SOA expert working on different projects supporting a reimplementation of the core IT solution of this umbrella ICT company for some dozen health insurance funds.

**Senior JEE developer for [Crelan](#)** 3/2014 till 9/2014

Java developer stabilizing an existing homebrew credit application of this bank that went through the pains of quick changes after a merger.

**JEE teacher for [Oak3](#)** 2/2014

Teacher after revamping details of my EJB and JPA knowledge, teaching a small team of Java people in a 5 days course EJB v3.1 and JPA v2.

**Configuration Management Engineer for [Argenta](#)** 7/2013 till 1/2014

Configuration management role as Java expert consolidating the infrastructure and procedures.

Aid the ongoing projects in staging issues, continuous integration, issue tracking and versioning.

**Java expert for [QBon](#)**

from 11/2012

Helping out with a 4 person startup of a friend to finalize an idea into a working website. QBon is a website where individuals can buy shop independent coupons as a gift so that the receiver can choose where and how to spend the gift value. Merchants working with QBon have the possibility to manage the profile and promotions of their shops and get statistics of the QBons that are eligible or were used in their shops.

Organised so that everybody works from home by having all deliverables online and working with tools like JIRA, Confluence, SugarSync and Subversion. Weekly teleconference meetings ensuring communication and discussing issues and design decisions in between the occasional real life meetings. Mastered the big amount of sourcecode already produced so be able to bugfix and add more functionality.

Technologies used include Jenkins, Maven, Spring, Wicket, Liquibase, MySQL, Hibernate, Google Hangout and Apps, Apache HTTPD, Selenium,...

**Technical Architect for [Certipost](#)**

8/2012 till 10/2012

Technical Architect of a [SEPA Direct Debit](#) extranet product of bPost developed/maintained/hosted by Certipost.

Introduction in a software engineering environment with clear procedures and roles. Automated checking of the implementation of the design in the codebase by static code analysis based on corresponding UML designs.

Examining the two SEPA SDD Rulebooks, especially to review compliance with the April 2012 updates and the usage of the different XSDs in the existing code base.

Assisting in analyzing and providing technical feedback for additional bPost requirements to allow integration of B2B clients via web services (SOAP and REST) and batch files (delivered via FTPS, AS2 or a proprietary HTTP extension). Designing a B2B security solution combining mutual SSL and an existing Certipost IAM solution.

Proposed a refactoring to consolidate business logic being scattered between BPM flows (backed by jBPM on JBoss v4), domain objects and web interface logic. Proposing and prioritizing performance improvements in the verge of having a hundred times more SDD Mandates then supported at the time: Isolating more independent processing services (PDF creation and email sending being part of the transaction), HBM lazy/eager loading, (H)SQL optimizations, using a proper Lucene distributed setup, optimizing transaction scopes, reviewing granularity of BPM nodes to avoid context switching overhead, ...

**Technical Architect and Analyst Coach for [Landsbond van de Christelijke Mutualiteiten](#)** 7/2012 till 9/2012

Intervention to analyse and document possible remediations for a stalled Java project. Interviewed parties involved and reviewed artifacts to get a grip on what went wrong in the process.

Combined the knowledge of different analysts to come to a broader understanding of the problem domain.

Coached the creation of a 'high level' analysis meant as a common language between IT and business and to enable founded decisions.

Applied UML knowledge to review and add different diagrams and descriptions of use cases and types documented in EA (Enterprise Architect).

Made suggestions on re-scoping/re-prioritizing the project(s) to have a more pragmatic match with business requirements.

Investigated the architectural evolution within LCM to come up with possible alternative designs bringing the 3 year old design up to date.

Helped in communicating the conclusions of this work through slide show presentations for management.

Documented two possible continuation paths in more detail including some effort estimations.

**Sabbatical**

2/2012 till 5/2012

After learning Wicket (first acquaintance [at BeJUG](#)), the RAD virus drove me to combine this technology with a back-end implemented using Spring Roo.

The business case at hand was my addiction to buy movies on DVD (of which I realized that it got out of hand once I discovered a double entry in a pile of unseen movies).

Integrated the resulting web application with [OpenID](#) as a way to pragmatically apply the concepts of my last job into an Open Source solution. Invested some time in trying to turn this code base into a true [OSGi](#) bundles and have them managed with [Gyrex](#) (Equinox, ZooKeeper, p2). Tweaked the WebUI (using HTML5) to make it more usable on mobile devices (so I could lookup DVDs while shopping).

Looked at the possibilities of reading/generating bar- and QR-codes to ease the entry of DVDs.

**Technical Team Lead and Senior Java Developer  
for Vlaamse Overheid**

9/2011 till 1/2012

Taking over the development of a 4 years old custom made IDM application ('WebIDM') in a small HB team close to the customer, department BZ-eIB of the Vlaamse Overheid.

Helped notifying/solving a crisis situation: Lack of documentation and design (caused by being too agile), together with some team changes at the original producer of the software, resulted in a situation where the solution used in production couldn't be reconstructed anymore.

Creation of a development machine as completely configured virtual Ubuntu machine with Eclipse and other development tools in order to speed up the introduction of new developers in the team.

Made sure that a complete, working deployment could be made out of the existing source code, a deployment running on a 64bit Solaris VBOX instance.

Migrating data and configuration from an older version of the IDM solution: That first version was initially developed to support the first webversion of Edison ('WebEDISON'), an application for schools to report administrative data to Onderwijs & Vorming, another department of the Vlaamse Overheid.

Implementing a new closed user group in addition to the existing four CUGs allowing focused management of identities (both internal and external) with their entitlements to numerous applications and network resources.

Realizing performance improvements and proposing design changes to incorporate functionality needed for a broader applicability of the application.

Preparing for the replacement of the provisioning component (SunIDM) and generally making it fit for a migration to newer infrastructure and usage with all applications related to the Vlaamse Overheid.

Handover to a technical team lead of HP to ensure successful continuation of the project in the case of a new investment decision.

## CV of Frederik Haesbrouck

### Credoc

10/2010 till 6/2011

Started as Senior Java developer building on my knowledge of Struts and first Spring versions to restart the development and deployment cycle of a dated application to register Belgian companies (called 'e-Depot') in preparation of a whole new implementation.

Worked in close collaboration with the operations team in realizing the new deployment. Helping out as well as learning a lot in the areas of Windows and Unix based Application Servers, firewall and reverse proxy configurations (combined with IBM products like Tivoli Access Manager and WebSEAL) and (hardware) implementations of a secure cryptoprocessor ([HSM](#)), [OCSP](#) and Time Stamping Authority (TSA) servers.

In depth learning/usage of [PKI](#) and SmartCard technology used in secure SOAP communications and for digital signing of PDF documents according to the European [XAdES](#) standards, as an extension to [XML-DSIG](#).

Designed, implemented and released 2 components as the basis of the new implementation of that old application used to submit the official publications of belgian companies ('e-Depot'): A new PDF signing applet resulting in XAdES-EPES files and a Signature webservice validating (online as well as deferred) XAdES signature files and extending them up till XAdES-X-L.

Developing a POC supporting the usage of e-ID cards in these 2 new components instead of the then used notary smartcards ('Real').

Negotiated with the Department of Justice the technical changes to be made to the e-Depot signature in support of e-ID signed and multisigned depots.

Assisted in the evaluation of Security Token Service for SAML, SOAP high speed message broker and longterm digital document storage solutions.

**Nationaal Geografisch Instituut (NGI/IGN)**

12/2009 till 9/2010

Originally hired to evaluate the proposition of a software vendor to organize GIS data transformations, especially in regard to using them in an Inspire (EU regulation) compliant orchestration of services.

Did in depth functional and organizational investigations besides evaluating the rest of the market for GIS transformation services. In the process, I gathered a lot of knowledge on the BI (Business Intelligence) field: All studied GIS transformation tools are based on existing ETL (Extract Transform and Load) tools.

Started the professionalization of the web development team by introducing source code versioning, continuous integration and encouraging documentation (through Trac, an Open Source collaboration tool based on a Wiki implementation and well integrated linked with Subversion). Stimulated internal technical knowledge sharing and a better common functional knowledge through biweekly developer meetings.

Assisted in the analysis of a reorganization effort by communicating and discussing my viewpoint as an external JEE Architect with experience in similar organizations to different people inside the organization as well as external consultants charged with the reorganization of NGI.

**Java Coach EJB 2.1 and 3.0**  
**Landsbond der Christelijke Mutualiteiten**

2/2008 till 7/2009

Coaching a mix of (about 35) junior/senior internal/external Java developers on new developments and maintenance of applications left untouched since up till 7 years.

Assisting in new developments based on EJB 3.0 implemented by OC4J 10g and Toplink 10, 11 and EclipseLink. Problem solving on platforms ranging from the old Windows/Hibernate standards, over EJB 2.1 on earlier OC4J 9g implementation on HP Unix to the most recent EclipseLink technology.

Lead the discussion around standards to be used in new developments: From the usage of technologies, the architecture of applications to the way projects are organized and report progress to management. Responsible for the evolution of the repository of third party software that the different teams had to adhere to in their developments.

Maintained a build system running on top of ANT with Ivy and Unix scripting featuring both Continuous as Nightly build capabilities with quite thorough reporting on unit tests, code quality and usage of third party libraries. Responsible for in-house developed technical components developed to shield Java development from the specifics of Oracle, Siemens and other proprietary software in the domain of file communication, printing, directory services, etc...

Intermediately worked 3 months full-time as technical lead to get a runaway project back on track ensuring a release on the planned deadline.

Assisted in many platform migrations both from Windows to HP Unix as well as towards newer versions of OC4J and Oracle DBs.

Quality assessments of code through code reviews ensuring future maintainability of the code base of new applications before the project team ends. Advocated the use of Dimensions PVCS despite the many problems experienced in using this tool originating from over the years ill configured worksets and a poor Eclipse plug-in. Giving expert advice and providing workaround solutions for some peculiarities of Ivy 1.4 and some in-house developed extensions.

Motivated people to build and maintain the knowledge base in an intranet Wiki and to document their design decisions in this way in order to enhance collaboration with colleagues working off-site.

**Technical Analyst / Projectlead for Dolmen CA** 2/2007 till 12/2007

Beside some personal education, the Mistral project for [OVAM](#) was most notable in this period.

Technical lead in the GIS part of new administrative application integrating five major applications (and numerous little other programs and interfaces) into an overall new web application, as main deliverable for the Mistral project.

Supporting a set of new functionalities to be mandated by a new law for the inventory of all land property by this (Flemish government owned) environmental organisation.

Delivered both as an intranet site (for geographical and regular administrative updates by their personnel) and an extranet site allowing third-party GIS updates and environmental queries for other governmental institutions.

[ESRI ArcGIS Server v9.2](#) fast track course complemented with months of self study and experimentation with the Java ADF and the ArcObjects libraries.

Architecting a totally decoupled application structure for interaction with the GIS server by using Spring v2 integrating with the JSF-based ESRI framework.

Mavenizing the complete ESRI SDK in order to enable flexible development and deployment procedures: A link to CVS containing the code and a Maven2 repository sufficed for setting up a new development or testing environment.

Advocated an agile development based on code containing quality documentation independent of IDE, web application server, JVM and software tools

Introduced Selenium as base for functional tests covering the E2E working of the developed system, on top of regular unit tests.

Integration of the GIS part in (the) other part(s) of the Mistral solution by means of web services and JSP tags allowing for complete isolation of the different parts.

Coached a junior Java programmer on his first job motivating him to dive in the peculiarities of the third-party software while maintaining a high level code quality.

Introduced SCRUM and some other agile methodologies for doing short running development cycles.

Invested big effort in motivating the customer into deciding upon desired functionalities and usability of the new system.

**Consultant J2EE for PM Services (SAGA)**

2/2005 till 2/2007

Consolidating the J2EE expertise as expert consultant in different J2EE projects and becoming a [Spring](#) expert.

Senior developer position for 5 months at Ministry of Finance for the PLDA project. Job evolving from Java design and development to analysis review and document consolidation.

Used technical knowledge of Java and Web development to help out junior developers in finishing a first release. Refreshed DB2 knowledge as all development and testing was based on personal copies of the testdatabase.

Optimized Ant build scripts to enable full automatic builds for local testing, staging and future usage within CruiseControl. Prepared migration of colleagues from a JBuilder IDE towards Eclipse, including ClearCase integration.

Learning and hands-on experience with iBatis, comparing with Hibernate knowledge learned from personal project.

Reviewed analysis documents and helped finishing them through feedback reports and meetings. Gathered specialized knowledge regarding customs authorities (by boat and plane), the Belgium tax system and parcel shipment regulations.

Senior J2EE developer position for 6 months at De Post for the CITS project.

CITS is a custom made callcenter support system integrated with a document scanning solution allowing location independent callcenter operation. Java webapplication using Spring (instead of traditional J2EE) with a dynamic webinterface to allow a rich client experience.

First real usage experience with [AOP](#) as decoupling technique and [CruiseControl](#) to endorse a testdriven development approach. Study of AJAX as a more formal successor of the used JavaScript techniques used at that time.

J2EE architect & coaching position at Belgacom for the TTW department supporting the business callcenters.

Job consisting both of maintaining existing J2EE applications (eTS, EAM) and of making new ones (UTI, MNW).

Designing and advocating a lightweight Spring (with Web Flows) based architecture, directly put into practise in several new deliveries.

A lot of one-to-one training and support for starting Java developers.

Refreshed WebSphere knowledge and Oracle/TOAD specific database experience.

Sharpened ClearCase insight and integration into IDE (WSAD) and deployment scripts.

## CV of Frederik Haesbrouck

### **IPC Senior J2EE developer**

1/2004 till 1/2005

Responsible for all aspects of an existing Extranet used in more than a hundred different countries worldwide under auspices of the [UPU](#) (United Nations).

The '[Customer Service](#)' system is being used by the different UPU members to enquire cross-country shipments.

Shipments cover of all kinds of letters and parcels, subdivided in seven 'products' according to historically grown collateral agreements. The system's main function is to ensure product specific workflows where reactions to enquiries are restricted in their duration.

Existing system being developed in 2000 on the basis of Java Servlets and Oracle PL/SQL stored procedures. Troubled program structure due to initial tight deadline and various subsequent hand-overs to individual developers with greatly ranging capabilities.

Initial code and infrastructure cleanup to ensure continuous performant round-the-clock operations without the need for bi-daily reboots. Consolidation of the infrastructure to Oracle 10g, Apache HTTP server v2.0.47 and IBM WebSphere v5.1.

Design, development, test and deployment of six different enhancement versions of the current system.

Java, HTML and eventually Struts coaching for the transition of a PowerBuilder expert.

Redesign of the system based of a lenient dynamic object oriented model using a selection of design patterns.

Recreating documentation artifacts of the current system in the form of Word documents, Erwin diagrams, Oracle comments and JavaDoc documentation. Maintenance and creation of new Crystal Reports backed by stored procedures written in PL/SQL.

Incremental prototype versions to validate EJB CMP, multi-layer architecture, Struts and clean HTML/CSS implementations.

Short test assignment in the Kahala project giving inside into the stability and performance of an american system accessible through WebServices.

### **SeeBeyond Sales Consultant**

6/2003 till 11/2003

Education and certification in SeeBeyond eGate v4.5 and exploration of ICAN.

Java development using eGate v4.5.3 for an EAI project in an airport environment. Overall project goal was to integrate internal and external information systems with a J2EE application under development. Communicate through JMS queues XML messages with the Tamino based server application.

Validate and transform low level text requests into application server level XML queries. Filter and transform all online published XML updates regarding flights and luggage into specific legacy interface formats and protocols of ten different systems. Examine and use of the Teletext protocol for information redistribution on Dutch television channels.

Development in a mixed environment of Win2000 and XP using SeeBeyond tools, XMLSpy and Eclipse. Using CVS version management tools combined with SeeBeyond's eSchema migration tool.

**National Bank of Belgium Java coach**

6/2002 till 2/2003

Coaching a team of programmers and analysts in their transition to the J2EE technology. Assisting people with Cobol and PowerBuilder backgrounds migrating into object orientation, Internet technology and Java.

Setting up a prototype consolidating the newly acquired EJB, Struts and JSP techniques. Working and extending upon a preliminary -inhouse build- framework on top of Struts, Log4J, JUnit, Xalan, Xerces, etc. Helping using the VisualAge for Java (v3.5.3) and WebSphere Studio Application Developer (v4.03) integrated development environments.

Working out a set of procedures in both analysis, database design, development and deployment, specific to the environment at the bank. Augmenting code quality through individual code reviews and code style feedback. Encouraging the investigation of the Open Source base and the eventual extension of it in order to facilitate future developments. Advocating and demonstrating a rigorous usage of User Interface scripting (JavaScript) and styling (Cascading StyleSheets).

DB2 databases hosted on a IBM mainframe were used for the storage layer of the program, directly used during the different stages of the development of the program. Final deployment on Unix servers (seperated web- and business logic tiers) running WebSphere v3.5.

**IBM ITSO San Jose CA**

1/2002 till 3/2002

Writing the [Redbook "CICS TS V2.2 EJB Deployment"](#) together with a team of specialists in the different involved expertizes: CICS TS, WebSphere on z/OS, Cobol, etc.

Gaining thorough experience with IBM's new development environment [WebSphere Studio Application Developer](#) (and Integration Edition), based on [Eclipse](#).

Putting the 'scaling to mainframe' paradigm into practice by designing, developing, testing and deploying a share trading application from the laptop environment up to the mainframe. Iterative development and deployment cycles including [distributed debugging](#) to a remote CICS TS z/OS cluster. Exploring the different techniques (proprietary (JCics to CTG) and [JCA](#)) for backend connectivity by studying and applying them to the sample trading application. Refreshing basic CICS skills by defining, configuring and diagnosing EJB containers hosting session beans. Analyzing Cobol application in order to wrap some existing CICS business logic based on VSAM files.

## CV of Frederik Haesbrouck

### **Zurich Extranet project**

1/2001 till 10/2001

Java Architect and teamleader role in an international extranet project.

Analysis and design of two developments cycles incorporating server-side, applet, application and Java scripting. Leading and coaching small development team of (varying between 5 and 11) junior Java and JavaScript developers. Intensive code review and feedback education for the Java developers.

Server side implementation based on WAS v3.5 and UDB v6.2 using the recent versions of the J2EE components. Usage of Open Source framework [Struts](#) complemented with configuration and XML extensions.

Creation of an Object Caching mechanism focused on low development and runtime overhead. Cross platform practise of developing on NT and deploying in a hybrid AIX, Solaris environment. Complete setup and procedure documentation of Apache, WebSphere and UDB environment on different operating systems. Study and prototyping on usage of [Ant](#) (Open Source build tool for Java) deployment.

### **Technical writer for IBM ITSO San Jose CA**

10/2000 till 12/2000

IBM residency writing redbook 'Programming with VisualAge for Java Version 3.5', role as architect/coach experienced in Java and VisualAge.

Learned about the new features of the product (still in beta at that moment) with access to the developers helping out on the discovered bugs.

Devising the changes to the existing ATM sample application showing the new possibilities of the tool.

Teaching Java to colleagues and helping out to make their code examples work.

### **FreWare**

from 9/2000

Foundation of limited company based in Belgium focused on consultancy missions at first. Update Enterprise JavaBeans skills through selfstudy.

### **NetVision (Ubizen), WebVision (eXpanded Media)**

5/1999 till 8/2000

Design and development of tariff simulation/optimization tool for mobiles. Internet application deployed as a Java applet embedded in a webpage (complete HTML user interface) with JavaScript.

The interactive [DITO](#) site allowing officers of the Flemish government to publish information (website) and incorporating a restricted discussing forum to exchange ideas with colleagues throughout the region (extranet). In this all Java application, business objects (persisted in an RDBMS) are controlled by servlets that display their results via Java Server Pages (JSP). Renew Java certificates ([Sun Certified Programmer for Java 2](#)).

Introduce an OO methodology into the organisation. Resulting procedures are backed by UML tools, all deliverables are versioned using VSS. Mentor of different other projects in analysis and design as well as on more technical aspects of Java.

R&D mission developing a common architecture for multimedia content management applications. Targeting applications integrate companies with the Internet (implying strong backoffice integration), so this architecture is based on Internet and Java technology and includes modules incorporating abstracting interfaces to existing open standards in the domains of WorkFlow, Persistency, Directory Services, Messaging, Systems Management, etc.

Crisis intervention putting a stalled Java project back on track. Solution used an XML based B2B communication.

Last update on 13th of November 2016  
Find current version on <http://cv.freware.be>

## CV of Frederik Haesbrouck

### **Bank Delen**

2/1999 till 4/1999

Analyse existing IT infrastructure (both HW and SW) of this investment bank.

Prototyping using Java, Servlets with WebSphere and DB/2.

Pre-analysis for building an interactive website offering direct trading instruments: looking at different architectures, evaluating software companies for jumpstarting the project, etc.

Planning the migration towards secured internet access on existing LAN infrastructure, generalizing email access, etc. Internal end user IT support.

### **IBM Belgium**

1/1996 till 1/1999

Complementary object oriented analysis and design courses. Additional education on commercial networks and operating systems. 5-weeks thorough (OOAD + OO-programming) course (+ test): Object Technology University School 1, C++ track.

Development (A&D) of an administrative program for a laboratory. The implementation was done with FoxPro and Visual Basic.

Developing (REXX) scripts to customize reports of the backup system ADSM on a mainframe of a pharmaceutical company.

Application development to automatically convert documents (mainframe generated, AFP-format) to the graphical format TIFF, used as input for VisualInfo. This application is part of a document management system of an insurance company.

Smalltalk pilot project for a utility company: graphical client for a Geographical Information System (GIS) running on AIX server.

Study and take exams to obtain mentioned certifications in Object Orientation and the OS/2 operating system.

Assist in prestudy enabling customers of a Belgium bank to manage their account via the Internet.

Residency at [Almaden Research Center, San Jose, CA](#). In 6 weeks time we (international team of 4 persons) studied Java and Netrexx to deliver the Redbook: '[Creating Java Applications using NetRexx](#)'.

Mission with another Belgium bank to assist as software developer in a team responsible for the development and maintenance of GUI applications used by the local branches to generate online mainframe transactions. Programs (developed with VisualAge for Smalltalk) communicate with (IMS and DB2) transactions.

Self study Javabeans, VisualAge for Java. Take tests, necessary to obtain previously mentioned (VisualAge for) Java certificates.

Another residency at Almaden Research Center being part of two projects related to the introduction of a new version of VisualAge for Java. [Research](#) areas: Corba integration, cooperation with external tools and the persistency tool of VAJ.

### **Alcatel Bell**

11/1995 till 1/1996

Study of X-Motif, development on Sun Sparc stations.

Maintenance of a multilayered network management system (Lisp and C) for buildings used in KredietBank.