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PROFESSIONAL INTERESTS

Software architecture using Agile process and Object-Oriented technologies.

Unit Tests, Object-Relational mapping.

Technical leader, project management, mentoring, audit.

PROFESSIONAL EXPERIENCE (SUMMARY)

Civil Engineer graduated from the ULB in 1993, “Prince2 Foundation” certified, “*OMG-Certified UML Professional Advanced*” and “*IBM certified Test 486, Object-Oriented Analysis and Design with UML*”, I was involved in process- and quality-oriented Object-Oriented software developments, with main experiences:

- ▶ **Object-Oriented process development** (Agile, Unified Process, OMT) and **Object-Oriented analysis and design** (UML, OMT), 17 years
- ▶ **Object-Oriented Architecture and Technical coordination** (GFDI, Dupuis, Cegelec, Fabricom, Spacebel, Alcatel), 12 years
- ▶ **Industrial and real-time projects** (Airport Baggage Handling, Photo Laboratory, Telecom Network Mgt, GSM, Private Radio), 5 years
- ▶ **Distributed objects architectures** (Spring, CORBA), 3 years development, known for 10 years
- ▶ **Java development**, 5 years (at GFDI, European Community, Fabricom, Spacebel), known for 8 years
- ▶ **C++ development**, 4 years (Fabricom, OAGroup, Alcatel), known for 10 years
- ▶ **Python development**, 2 years (Dupuis, Fabricom, SASIT), known for 5 years
- ▶ **Caché development**, 1 year (Dupuis).

My projects were generally three-tiers projects (distributed environment), using different operating systems (Unix, Windows, Linux), and Relational Databases (Oracle, MySQL, SQLServer, DB2 on ISeries).

Some projects were also client facing: at the GFDI, at the European Commission, at Dupuis, at Fabricom (client: Amsterdam Schiphol Airport, Kodak USA) and at Alcatel (client: Belgacom).

In parallel with this architecture and development activity, I'm a technical trainer (Java, OO, UML, CORBA) for 8 years, and I regularly audit projects and people (technical audits or interviews).



PROFESSIONAL EXPERIENCE (DETAILS)

FloConsult SPRL Freelance

Audit / Training / Consulting

In parallel with main activities, I periodically perform short activities to help companies for evaluation, knowledge transfer, ...

Companies: People & Technology, DPEurope, Valtech-GFI, Cegelec.

Audit, consulting and coaching for:

- Project organization (estimation, risks, ...),
- Requirement activities (Use Case, modeling)
- Architecture and code development
- Test activities
- Tools
- Quality and Deployment Procedure Handbooks

Course material realization and presentation about:

- Object-oriented Analysis and Design using UML
- Python and Java programming languages
- Distributed architecture using CORBA

Main Projects

01/07-today: Enterprise Architect, PMO member & Java technical leader – GFDI (M-Team)

Enterprise architect: member of a 5 persons team, in charge of first documenting the existing (AsIs) enterprise architecture, using Enterprise Unified Process, UML and N+1 views, collaborating with TOGAF enterprise architects. Training of teams in (enterprise) architecture and OO analysis and design. Secondly in charge of the “ToBe” enterprise architecture, in terms of documentation, tools, and mapping with the client models.

PMO Member: member of a 6 people PMO, aiming at widening the agile practices in the whole organization. Participation in the customized Unified Process documentation and appliance. Participation in the system architecture documentation using UML, the N+1 views, and Rational Software Architect. Organization of multi-projects meetings (interface contracts, retrospectives,...). Development of standard *Software Architecture* and *Iterations Follow-Up* documents. Meta-scrum master of a 20 persons team.

Java technical leader (04/07-06/08): technical lead of a 4 people team developing a project migrating and enhancing the legacy detection of accidents. Technical context: Java, Spring, Eclipse RCP, DB2 on Iseries. Use of SpringRules.

07/06-12/06: UML Analyst – Refac project – Christian Mutual Insurance / Saga Consulting

Realization of the Functional Design (N+1 views, mainly Use-Case view) of the new Hospital Invoicing Circuit (Carenet or Paper invoices), using UML 2.0 and Rational Software Modeler CASE tool. Participation in the Technical Design (Java environment) of the Third-Party Billing sub-system, still using UML 2.0 and Rational Software Modeler.

02/06: Senior SW Engineer – Front-ends projects – IBA

In the context of adding new interfaces on the existing control system, realization of the architectural design documents (N+1 views) at system level and at the project levels. Use of UML 2.0, CASE tool Enterprise Architect.



08/05-08/06: Software Architect – Clients & Invoices Mgt system – Dupuis

Architect of new modules; 2-3 people team, agile development. Use of UML, Caché (Post-Relational Database), Unit Tests.

02/04-07/05: Senior Analyst – Contract Management -Sword / European Commission

Participation in the analysis of the commission-wide contracts management system. Creation of the non-regression JUnit tests suite, using Eclipse and JDBC. Use of UML, Eclipse (with also Profiler plug-in), Rational Rose, PowerDesigner, Oracle, Toad, PVCS.

Modification of the contracts model generation using XML, and Business modelling of the contracts and assets management system.

Consolidation of the Requirements and Use-Case-Model using Rational Rose, Rational Requisite Pro, and Rational SoDA.

10/03-12/03: Software trainer – Cegelec /AKKA

Adaptation and presentation of our courses: “Agile software development with UML” (case study: a baggage handling simulation software) and “The Java Language”.

01/03-09/03: Software architect – Catalogue Mgt system – Dupuis / Gestionique

Refactoring and prototyping of the architecture of a Catalogue Management system. Study and modelisation of the three-tiers model. 4 people team.

Use of UML, Python, WxWindows (GUI), Mx (RDB access), Zope (GUI/RDB access), PyUnit (UnitTest), SQLServer (RDB). Tools: Object Domain (CASE tool), VSS (version management), WxPython (Python IDE). Windows environment.

02/02-05/03: System Architect – Baggage Handling system – Fabricom / N-Tech Benelux

System architecture of a Baggage Handling system composed of PC's (in C++) and PLC's (Siemens S7). 15 people team.

Study and modelisation of the interface between the PC's and the PLC's, as well as of the PLC software, according to the MIL standard, and using UML.

Participation in the PLC implementation (Siemens S7, SCL language).

Development of a PLC Logging utility in Python. Windows environment.

12/01-01/02: Software Architect - Photo Laboratory SW - Fabricom / N-Tech Benelux

Refactoring and profiling of a photo laboratory management system developed for Kodak, and written in Java. 2-3 people team. Use of UML, Java, JUnit, XML. Tools: Jbuilder (Java IDE), Together (CASE tool), and JProbe (profiling tool). Windows NT environment.

04/01-11/01: Software Architect – Baggage Handling system - Fabricom / N-Tech Benelux

Software architecture and development of two sub-systems of a Baggage Handling System based on vehicles (Destination Coded Vehicle).

First sub-system: distributed PCs managing the DCV track and carts.

3 people team. Quasi real-time multi-threaded architecture. Use of UML, eXtreme Programming (4 iterations), C++ language (Standard Library), Design Patterns, MySQL(RDB), UDP/IP communication. Tools: Together (CASE tool), Kdevelop (C++ IDE) and CVS (version management). SuSE Linux environment.

Second sub-system: graphical control system (SCADA) prototyping using UML and Python language (TKinter and IDLE).

12/00-02/01: System Architect – Baggage Handling system - Fabricom / N-Tech Benelux

Software Architect of a Baggage Handling System based on vehicles (Destination Coded Vehicle). Study of a distributed architecture based on CORBA (real-time and fault-tolerant).

5 People team. Use of UML, 4+1 Views. Tools: Together (CASE tool). Windows NT and Linux environment.



08/00-11/00: Software engineer - Photo Laboratory SW - Fabricom / N-Tech Benelux

Involved in the technical project management (6 people team) and in the development of a photo laboratory management subsystem. Use of UML, Rational Unified Process, Java, Junit, Swing, Python, XML.Tools: TogetherJ (CASE tool), Visual Source Safe (version management), Jbuilder (Java IDE). Windows NT environment.

06/00-07/00: Software Engineer – GSM Network Topology - Spacebel/ComIT

Involved in the development of a GSM network topology prototype. Use of UML, Java. Tools: Rational Rose (CASE tool), Visibroker/Application Server 4.0 (CORBA/EJB), Jbuilder (Java IDE). Windows NT environment.

02/00-08/01: Python developer – Medical Results Analysis - SASIT

Development of a translation script, to publish medical analysis results in PDF format (Python, ReportLab). 2 ManMonths development in total.

O.A. Group (Spacebel) Consultant

03/99-08/99: OO Consultant – Mainframe Access Layer - Christian Mutual Insurance

Development of a DLL to allow Windows access of Mainframe functions. Use of UML, 4+1 views architecture model, Design Patterns. Tools: Visual C++ multi-threading. Windows NT environment.

10/98-02/99: OO Consultant – CASE tool auditor - Christian Mutual Insurance

Participation in the OO CASE and Development Tools Selection Process.

Definition of the OO criteria (UML support, Process support, CORBA support, language support,...) and evaluation.

Tools: Rational Rose, Select Enterprise, Paradigm+ and Designer 2000.

09/98-04/00: CORBA and OO Trainer

Course material realization and presentation. CORBA course presenting the CORBA architecture and services, given in three days with practical examples.

OO Introduction course, given in one day (OO notions, UML, process, technologies).

Alcatel ETCA (Charleroi) Employee

12/96-08/98: Software engineer - TMN/TINA (CORBA) Gateway - Network Management

Study and development of a Gateway between an existing TMN system and a CORBA/TINA one. In charge of the specifications, prototyping, analysis, design phases and involved in the development phase. Use of UML, 4+1 views architecture model, Orbix, Design Patterns, C++ language, multi-threading (POSIX). UNIX environment.



01/96-11/96: Software engineer - Performance Measurements Software - GSM

Performance Measurements functionality (centralization and treatment of network performance measurements) of the BSC (Base Station Controller). Involved in the specifications, analysis, system architecture phases and CHILL modules development. Use of UML, 4+1 views architecture model, conceptualization by use cases. UNIX environment.

11/95-01/96: Software engineer - TRACE Software - specifications and analysis - GSM

TRACE functionality (network performance measurements in transactions terms) of the BSC (Base Station Controller). Involved in the specifications and analysis phases. Use of OMT and use cases (Jacobson). UNIX environment.

10/94-11/95: Software engineer - FTAM Software - reverse engineering- GSM

Reverse Engineering and maintenance of the FTAM (File Transfer Access and Management) module of the BSC (Base Station Controller). Object Oriented Analysis of the protocol (OMT). OSI Model. CHILL language used. UNIX environment and IBM Mainframe.

07/94-09/94: Software engineer - integration and validation - DSPMR

Digital Signaling Private Mobile Radio. Integration and validation of an application software for a radio transceiver (RUSYS). Software lifecycle "WATERFALL model": involved in the coding, unit tests, integration, validation phases (SA/RT method). ANSI-C language used. UNIX environment.

08/93-06/94: Development engineer - digital signal processing software - DSPMR

Digital Signaling Private Mobile Radio. Realization of a digital signal processing module for a simulcast radio network. Signal processing simulation (Cossap Software on workstation). Software lifecycle "WATERFALL model": involved in specifications, analysis, architecture phases (SA/RT method). ANSI-C language used. UNIX environment.



EDUCATION

Telecommunications Engineer, 1993, Free University of Brussels (ULB), "La Plus Grande Distinction". **Erasmus Student**, September 92-February 93, Technische Universität München (Germany).

"Prince2 Foundation" certification, 24 June 2010 (see <http://www.prince2.com/>).



"IBM-Certified Test 486, Object-Oriented Analysis and Design with UML", 27 Aug. 2004 (see <http://www.ibm.com/certify>).



"OMG-Certified UML Professional Advanced", 12 July 2004 (see <http://www.omg.org/uml-certification>).



"OMG-Certified UML Professional Intermediate", 8 April 2004 (see <http://www.omg.org/uml-certification>).



"OMG-Certified UML Professional Fundamental", 6 February 2004 (see <http://www.omg.org/uml-certification>).



Valtech Trainer Certification, "Object-Oriented Analysis and Design with UML and Patterns" course (5 days), June 2000.

Brainbench Certifications (Internet certifications refer to <http://www.brainbench.com>):

- Master High IT Aptitude, September 02, 1999
- Master Object-Oriented Developer, September 15, 1999
- Master C++ Programmer, September 16, 1999
- Java Programmer, October 20, 1999
- CORBA 2.3 C++ Programmer, May 19, 2000



SOFTWARE SKILLS

Object Oriented methods:

Agile, Scrum, XP (eXtreme Programming), EUP (Enterprise Unified Process), TOGAF (notions), Prince2, Unified Process (RUP), , OMT, and OOSE(Jacobson) methodologies.

Object Oriented languages and notations:

UML, 4+1 views architecture model (Kruchten), Design Patterns, OO Design principles (R. Martin), BPMN (notions),

Programming languages:

Java, Python, Java, C++, C, Caché, SCL(Siemens S7), CHILL, Pascal, HTML (Javascript).

Databases:

O/R mapping (Hibernate), Caché, RDBMS (Oracle & Toad, MySQL, SQLServer), JDBC/ODBC.

Middleware/Frameworks:

Spring, CORBA (ORBIX, OmniORB, Visibroker).

Java tools and technologies:

Spring, Eclipse, Eclipse RCP, Hibernate, NetBeans, Swing, JBuilder, Ant, Log4J, JUnit, JProbe.

Tools:

Rational Software Architect, Jira, Sparx Enterprise Architect, Caché, Eclipse, Omondo, PowerDesigner, Rational Rose, Object Domain, Subversion, CVS, PVCS, Visual Source Safe, WxPython, Simatic, Together, KDevelop, Rational Requisite Pro, MS-Visual Studio, Rational Clearcase, IDLE, MS Project.

Operating Systems:

Mac OS, Windows (NT, 95, 2000, XP), Linux (SuSE), UNIX.

Network:

TMN (Network Management): TINA and OSI standards, TCP/IP and UDP/IP.

Quality Assurance:

MIL-Standard, Software development according to the ISO 9001 standard, CMM (notions).

Office tools:

Visio, OpenOffice, Gimp, StarOffice, MS-Office.



SPECIFIC TRAININGS (EXTRACT)

- ▶ “Prince2 Foundation”, Istya, June 20110, Brussels (M-Team In-House)
- ▶ “Enterprise Architecture Foundation Seminar 2008”, Gartner, June 2008, London
- ▶ SpringOne 06/2007; Most appreciated talks: “*Improving application design with a rich domain model*” (Chris Richardson); “*Pragmatic SOA - Substance, not hype*” (Arjen Poutsma); “*Advances in Aspect-Oriented Programming*” (Ramnivas Laddad)
- ▶ Valtech day 03/2007; “*Ruby on rails*” & “*Eclipse RCP*”
- ▶ Javapolis 12/2006; Most appreciated talks: “*Agile Development Practical experiences*” (Johan Lybaert); “*Typical Pitfalls in Agile Software Development*” (Jutta Eckstein)
- ▶ “*Caché Entrée*”, 2004
- ▶ “*An agile UP with XP practices*” (Craig Larman), “*Java concurrency utilities*” (D.Lea, D.Holmes), “*Patterns for persisting objects in RDBs*” (J. Yoder), “*Reverse engineering architectures using patterns*” (M. Stal); ECOOP 2003 (2 days).
- ▶ “*Extreme programming and Zope*”, “*Design Patterns and Python*”, “*Unit testing Zope for fun and profit*”, “*CORBA features for large scale developments*”...; EuroPython 2003 (1 day).
- ▶ “*Python and XML*”, “*Numeric Python*”, “*Python in High performance computing*”,...; EuroPython 2002 (1 day).
- ▶ “*Java and/or .NET?, step-by-step comparison*” (Michael Stal), “*Specifying and Achieving Non-Functional Requirements*” (Len Bass, Felix Bachmann), and “*Using and Adapting Extreme Programming*” (Stefan Rook, Martin Lippert); ECOOP 2002 (2 days).
- ▶ “*Patterns at Work*” and “*A Method for Pattern-Based Software Construction*” (Buschmann); “*Framework Development and Adaptation with UML*” (Fontoura/Pree/Rumpe); “*Programming with XML*” (Buneman); ECOOP 2000 (2 days).
- ▶ “*Object-Oriented Analysis and Design with UML and Patterns*”, Valtech (GFI Wavre), june 2000 (5 days).
- ▶ “*Train the Trainer*”, CEFORA, April 1999 (2 days).
- ▶ “*Writing Distributed Applications with Java*” and “*CORBA Essentials for Effective Internet Computing*”, Inprise, February 1999 (2 days).
- ▶ “*CORBA Enterprise Architectures*”, Objective Alliance, September 1998 (3 days).
- ▶ “*Analysis Patterns*” (Fowler); “*Designing Object-Oriented Software Architectures*” (Aksit); “*Designing Concurrent Object-Oriented Programs in Java*” (Lea/Holmes); ECOOP 1998 (2 days).
- ▶ “*Développer une application distribuée avec CORBA (version Orbix)*”, Valtech (Paris), February 1997 (5 days).
- ▶ “*Analyse et Conception Système avec OMT*”, Valtech (Paris), April 1996 (5 days).



LANGUAGES

French: mother tongue.

English: good knowledge.

Dutch: good knowledge.

German: passive knowledge.

Spanish: notions.

CITIZENSHIP

Born on October 31th, 1970, Belgian and French, married, 2 children.

MISC

Co-founder in 2010 of Palantiris SPRL, company specialized in medical processes, see www.palantiris.com.