Johan Peeters – Curriculum Vitae

Date of birth	11/06/1958
Nationality	Belgian
Status	Married

Johan started his career at Alcatel in 1992. In 2001, he became independent and has served customers in the telecom industry, public transport, media, financial services, retail and consumer electronics.

As a software architect, his main concern is quality. He delivers qualities intrinsic to software such as security, scalability, responsiveness and modularity. His expertise further extends into life cycle qualities such as short time-to-market, cost-effective test coverage and smooth deployment .

Johan's interest in technology is at the service of creating value for his customers. He enjoys exploring new frontiers and honing his craft. He contributes to advancing the state of practice by engaging with the global software engineering community in publications, courses and conferences. He has a special interest in software security.

Languages
- Dutch (Mother Tongue)
- English (Oral : near-native - Written : near-native)
- French (Oral : fluent – Written : good)
- German (Oral : fair - Written : fair)

Education
- M. Sc. in Computer Science, K.U. Leuven, Belgium, magna cum laude
- B.A. (Hons), Open University, Milton Keynes, U.K., 1st class

Work Experience

EVS   August 2016 – November 2016

EVS is the world leading live video technology provider. It pioneered digital video servers for ingest and playout of video streams in the early 90's and introduced Live Motion replay in 1994.
This assignment is focused on the security architecture for EVS' new flagship product line.

Tasks performed:
- AuthN/Z architecture
- Network security architecture

Domain:
- Live video production,
- AuthN/Z,
- Identity management.

Technology keywords: REST, API Gateway, Kong, OpenResty, IdP, Keycloak, JWT, OAuth, OpenID Connect, STS, VLAN.

Colruyt Group Services   April 2015 – April 2016

Colruyt Group is best known for its retail activities, but it also branches out in to other fields such as power generation, fuel distribution and catering.
Colruyt has a long tradition of innovation through IT. Today, this tradition is continued in its efforts to keep operational support systems at the technological forefront and developing its etailing activities.
Architecture features prominently in Colruyt Group Services' corporate IT strategy. Colruyt's commitment to careful planning, combined with a strong corporate no-nonsense, can-do culture, makes it a challenging and rewarding place to work for an IT architect.
This assignment was focused on security architecture.

Tasks performed:

- Secure deployment of HANA databases to support corporate financial systems
- Design and development of a Security Operations Center
- Security architecture for corporate Enterprise Service Bus

Domain:
- Log management,
- Secure communications,
- Web services.

Technology keywords: ArchiMate, Big Data, Elasticsearch, Logstash, Kibana, QRadar, SAP HANA, webMethods, ESB, PKI, STS, SOAP, SAML, REST, OAuth, Puppet, TLS.

Prodata Mobility Systems (now Kapsch)   February 2013 – November 2014

Prodata Mobility Systems builds mass transit advanced fare collection and intelligent transport systems. Development was mainly related to the ReTiBo contract with De Lijn, the corporation responsible for metropolitan and regional public transport in Flandres.
This assignment was mainly focused on the architecture of the network of devices in the field, either mounted in vehicles, or along routes.

Tasks performed:
- Security architecture:
  - Basic protection measures for devices in the field,
  - Securing the distribution of contracts to contactless smartcards,
  - PKI,
  - Coaching developers in cryptography;
- Performance engineering:
  - Communication with back office,
  - Software updates;
- Acceptance test support: refining requirements to unambiguous and verifiable acceptance criteria in consultation with the customer.

Domain:
- Embedded systems,
- Smart cards,
- Intermittent connectivity.

Technology keywords: PKI, Active Directory Certificate Services, OpenEmbedded, Ubuntu, Java, OSGi, JDBC, REST, UML, Calypso smartcards, Nginx, Gatling, Scala, OAuth, Ember, JavaScript, HTML5, Sage, Python.

Belgacom (now Proximus)   May 2011 – November 2012

Belgacom is the Belgian incumbent telecom operator.

Tasks performed:
- Set up a continuous integration/continuous deployment infrastructure serving development teams across the company,
- Automate integration testing.

Domain:
- Software build and release management,
- Code quality assessment metrics,
- Deployment,
- Development.

Technology keywords: Puppet, Jenkins, Java, RHEL, Tomcat, Sonar, Maven, Nexus, JUnit, Mockito, Perl, ClearCase, WebSphere Portal Server, Spring, Hibernate, JSP.

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3E   February 2011 – May 2011

3E provides consultancy services and software products to improve the performance of sustainable energy systems and optimize energy consumption.

Tasks performed:
- Threat model for SynaptiQ, 3E's O&M platform for wind farms,
- Security architecture for SynaptiQ.

Domain:
- Threat modeling,
- Security software architecture.

KBC   November 2008 – September 2010

KBC is one of the leading Belgian banks.

Tasks performed:
- Analyze performance of banking applications on Unix platforms,
- Compare performance of Java on Unix with COBOL on z/OS,
- Propose and implement improvements,
- Integrate performance engineering into the software development cycle,
- Comparative study of Java profiling and performance analysis tools.

Domain:
- Performance engineering,
- Load testing.

Technology keywords: Java, JMeter, EGL, Oracle, DB2, Solaris, z/OS, COBOL, WebSphere, JProfiler, dynaTrace, HP Diagnostics.

Atos Worldline   March 2008 – October 2008

Atos Worldline processes electronic transactions and develops payment technologies.

Tasks performed:
- Propose and implement measures to
  - Improve time to market,
  - Improve software quality,
  - Reduce maintenance costs,
  - Reduce implementation costs,
  - Share knowledge more widely among developers;
- Coach development teams in agile processes and techniques.

Domain:
- Payment terminals,
- Key management,
- DEP (Data Encryption Peripherals), HSM (Hardware Security Module).

Technology keywords: HSM, key management.

Fortis (now BNP Paribas)   May 2008 – July 2008

Fortis is a financial services group.

Tasks performed:

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Fortis is implementing a corporate Identity and Access Management (IAM) system. I was involved in writing the RFP, evaluating bids and selecting an IAM package vendor and service provider. I had special responsibility for integration and hence made a detailed study of the interfaces of authoritative and managed systems.

Domain:
Identity and Access Management

Technology keywords: IAM, AuthN, AuthZ

NBB/BNB   April 2007 – March 2008

Nationale Bank van België/Banque Nationale de Belgique (NBB/BNB) is the central bank of Belgium.

Tasks performed:
- Analysis, design and implementation of an application to support dematerialization of bearer securities,
- Refactoring clearing database.

Domain:
- Financial markets support and regulation.

Technology keywords: Java, SQL, Oracle, PL/SQL, DB2, XML, XSD, z/OS, COBOL, JCL, WebSphere.

Tein Telecom   May 2006 – March 2007

TEIN Telecom is a telecom integrator with an expanding interest in surveillance camera networks. They provide added value to third party components with integrated management and operational control capabilities.

Tasks performed:
- Architectural audit,
- Software development process coaching.

Domain:
- Surveillance camera networks.

Technology keywords: Delphi.

VRT   April 2006 – December 2006

VRT is the public broadcast organization in Flanders. Apart from traditional radio and television, they also provide content via alternative channels such as the web, teletext and mobile apps. The project replaced the bespoke web content management system of the newsroom with a new one, based on an off-the-shelf component.

Tasks performed:
- Convert the content from the old to the new system, design and implementation,
- Teletext page numbering, design and implementation,
- RSS feeds, design and implementation.

Domain:
- Content management systems for a media company.

Technology keywords: Java, Oracle, MySQL, JavaScript, JBoss, Hibernate, RSS, Teletext, JSP, servlets.

UltraGenda   May 2006 – September 2006

UltraGenda is the healthcare appointment system market leader in Europe. Their customers in the UK require integration with the new NHS centralized IT services, notably with Choose and Book, a set of applications that allow general practitioners to book an appointment in any hospital in the country online.

Tasks performed:

Co-ordinate Choose and Book certification.

Domain:

Health Care.

Technology keywords: C#.

Proximus   May 2005 – February 2006

Proximus uses an Intelligent Networks (IN) platform to mediate access and capture usage for prepaid mobile voice calls.

Tasks performed:
- Acceptance testing 4 IN platform releases,
- Follow-up of defects,
- Test automation,
- Improvements in delivery procedures.

Domain:

Mobile telecom operator.

Technology keywords: Ruby, Fit, FitNesse

De Post/La Poste (now bpost)   April 2004 – March 2005

The Belgian Post Group is the state banker. The project reduces the number of paper-based payments in order to cut back on processing costs and reduce fraud.

Tasks performed:
- Increase capacity of electronic transaction processing chain,
- Improve security of electronic transaction processing chain,
- Give demonstrations and technical advice to government agencies with a view to changing their payment methods,
- Coaching back office staff.

Domain:
Financial transaction processing

Technology keywords: PKI, digital signatures, Python

Philips   August 2003 – December 2003

iPronto is an innovative remote control with IP interface for the high-end home theater market.

Tasks performed:
- Defect analysis,
- Requirements engineering,
- Design and implementation of networking improvements.

Domain:
Consumer electronics.

Technology keywords: Java, WiFi.

Banksys (now Atos Worldline)   April 2003 – October 2003

Java architecture for the CZAM/XENTA Point of Sale payment terminals.

Tasks performed:
- Java programming model,

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- Java APIs,
- Definition of code generation approach,
- Proof of concept implementation.

Domain:
Payment terminals.

Technology keywords: Java.

Philips   February 2002 – February 2003

Web services for networked consumer electronics.

Tasks performed:
- User requirements analysis for Electronic Program Guide,
- Requirements analysis for provisioning,
- Software specifications for Electronic Program Guide,
- Quality assurance Philips Internet Access Platform (PIAP),
- User interface specification for Internet radio.

Domain:
Consumer electronics.

Technology keywords: Java, WSDL, SOAP, UML, OpenSTM, Tomcat, cryptographic zero-knowledge protocols.

Lean Chain   September 2001 – January 2002

B2B transaction platform serving the automotive aftermarket .

Tasks performed:
- Establish and lead the software development team,
- Liaise with third party suppliers,
- Program management.

Domain:
B2B automotive aftermarket

Technology keywords: webMethods, EDI.

Acunia   December 2000 – May 2001

Vehicle telematics platform.

Tasks performed:
- Proof of concept demonstration of ACUNIA software stack on PDAs,
- Security architecture,
- User interface architecture.

Domain:
Vehicle telematics.

Technology keywords: Java, OSGi, JMS, PKI, HTTP.

Alcatel (now Nokia)   September 1992 – October 2000

Telecom vendor

Tasks performed:
- Moving a C-based financial transaction system to J2EE component architecture,
- Introduction of Rational Unified Process (RUP),

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- System architecture for payment applications framework,
- Web-based management console for payment applications,
- Design and implementation of the SNMP Management Information Base (MIB) compiler for ALMA-Expert,
- Project management, architecture and design of SNMP-Expert,
- Project management, architecture, design and implementation of the ALMA-Expert high availability solution built on clustering technology,
- Design mentoring broadband access network management,
- Design and implementation of a management system for interactive video on demand,
- Research into advanced architectures for interactive multimedia networks,
- Object oriented system analysis and design methodologies research,
- ESPRIT research project on hardware/software co-design: INtegrated SYstem DEsign (INSYDE).

Domain:
Telecom.

Technology keywords: CLOS, VHDL, ADSL, MPEG, SNMP, CORBA, EJB, XSLT, WebLogic, C, Struts, Tomcat, JSP.