Johan Peeters – Curriculum Vitae

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

I started my career at Alcatel in 1992. In 2001, I set up Johan Peeters BVBA to offer architectural services.

Johan Peeters BVBA offers consultancy, coaching, training and bespoke development, notably pilot projects and Minimal Viable Products (MVP). I build these with an ad-hoc team on a fixed-price, fixed-term basis. Clients span a variety of industries including telecom, public transport, media, financial services, retail and consumer electronics.

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

I enjoy exploring new frontiers and honing my craft. I contribute to advancing the state of practice by engaging with the global software engineering community in publications, courses and conferences. I have a special interest in software security. To advance the state of practice in secure software engineering, I founded secappdev.org.

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

Erasmus Hogeschool   October 2017 -

The Design and Technology department of the Erasmus Hogeschool Brussel (EhB) offers professional bachelor degrees in Information Technology. I teach final year students software security.

Essent   January 2018 - March 2018

Essent is an energy company. I developed a PoC with an Identity Provider and Security Token Service for them.
Technology keywords: SAML, Keycloak, AWS, Angular, Java.

Farmad   June 2017 - October 2017

Farmad builds software for pharmacies. It contracted Johan Peeters BVBA to build a Proof of Concept for moving its infrastructure to the cloud securely.
Technology keywords: REST, AWS, Lambda, OAuth 2.0, Auth0, JWT, .NET Core, Node.js, React, DevOps.

i.Revitalise   March 2017 – May 2017

i.Revitalise is a platform for sharing capacity on capital-intensive equipment. This project provided i.Revitalise with a Minimal Viable Product (MVP).
Technology keywords: REST, Docker, Heroku, PostgreSQL, Ruby on Rails, React.

Thanksys   January 2017 – April 2017

Thanksys is a transaction platform for payment with community currencies, loyalty points, coupons, gift cards as well as fiat money. This project built a pilot IAM system for the Thanksys REST APIs.
Technology keywords: REST, Keycloak, JWT, OAuth 2.0, OpenID Connect, Docker, AWS, PostgreSQL, Spring Boot.

EVS   August 2016 – December 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 was focused on the security architecture for EVS' new, micro-services based, flagship product line.
Technology keywords: REST, API Gateway, Kong, IdP, Keycloak, JWT, OAuth, OpenID Connect, VLAN.

Colruyt Group Services   April 2015 – April 2016

Colruyt Group is best known for its retail activities, but it also branches out into other fields such as power generation, fuel distribution and catering. Colruyt has a long tradition of innovation through IT. Architecture features prominently in Colruyt Group Services' corporate IT strategy.

This assignment was focused on security architecture.
Technology keywords: ArchiMate, Elasticsearch, Logstash, Kibana, QRadar, SAP HANA, webMethods, ESB, PKI, 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 focused on the architecture of the network of devices in the field, either mounted in vehicles, or along routes.
Technology keywords: PKI, Active Directory Certificate Services, OSGi, REST, Calypso smartcards, Nginx, Gatling, Scala, Ember, Apache Camel.

Belgacom (now Proximus) May 2011 – November 2012

Belgacom is the Belgian incumbent telecom operator. They hired me to optimise their software build and release management.
Technology keywords: Puppet, Jenkins, Java, RHEL, Tomcat, Sonar, Maven, Nexus, JUnit, Mockito, Perl, ClearCase, WebSphere Portal Server, Spring, Hibernate, JSP.

3E February 2011 – May 2011

3E provides consultancy services and software products to improve the performance of sustainable energy systems and optimize energy consumption. I helped them build a threat model for SynaptiQ, their wind farm O&M platform and provided a security architecture to mitigate these threats.

KBC November 2008 – September 2010

KBC is one of the leading Belgian banks. I analyzed the performance of banking applications on Unix platforms for them and compared this to what was being achieved with the with COBOL on z/OS. A number of improvements were proposed and implemented.
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. I helped them with key management strategies for a new generation of Hardware Security Modules (HSMs).
Technology keywords: HSM, key management.

Fortis (now BNP Paribas)   May 2008 – July 2008

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

NBB/BNB   April 2007 – March 2008

Nationale Bank van België/Banque Nationale de Belgique (NBB/BNB) is the central bank of Belgium. I designed and lead the implementation of an application to support dematerialization of bearer securities.
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. They provide added value to third party components with integrated management and operational control capabilities.
I performed an architectural audit of their surveillance camera platform system provided software development process coaching.
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.
Technology keywords: Java, Oracle, MySQL, JavaScript, JBoss, Hibernate, RSS, Teletext, JSP, servlets, Polopoly.

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. I co-ordinated Choose and Book certification.

Proximus   May 2005 – February 2006

Proximus uses an Intelligent Networks (IN) platform to mediate access and capture usage for prepaid mobile voice calls. I was responsible for the acceptance testing of 4 IN platform releases
Technology keywords: Ruby, Fit, FitNesse

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

The Belgian Post Group is the state banker. I was given the technical responsibility for a project reducing the number of paper-based payments in order to cut back on processing costs and reduce fraud. This included increasing the capacity and security of the electronic transaction processing chain
Technology keywords: PKI, digital signatures, Python.

Philips   August 2003 – December 2003

Philips iPronto was a remote control for the high-end home theater market ahead of its time that had an IP interface. I designed and implemented a number of networking improvements.
Technology keywords: Java, WiFi.

Banksys (now Atos Worldline)   April 2003 – October 2003

Java architecture for the CZAM/XENTA Point of Sale payment terminals including the Java programming model, Java APIs and a Proof of Concept implementation.
Technology keywords: Java.

Philips   February 2002 – February 2003

Design and acceptance testing of web services:
- Electronic Program Guide,
- provisioning,
- Philips Internet Access Platform (PIAP).

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

Lean Chain   September 2001 – January 2002

I served as the head of engineering for the Lean Chain automotive aftermarket transaction platform.
Technology keywords: webMethods, EDI.

Acunia   December 2000 – May 2001

I was responsible for the security and user interface architecture of the Acunia vehicle telematics platform.
Technology keywords: Java, OSGi, JMS, PKI, HTTP.

Alcatel (now Nokia)   September 1992 – October 2000

Alcatel is a telecom equipment vendor.
I started my career as a research engineer and was one of a small team to build the world's first Video on Demand system. Other research interests included ADSL and hardware-software co-design. After leaving the research center, I spent a couple of years working on ALMA-Expert, an expert system for network management. I was responsible for developing SNMP-Expert, which became the world's leading platform to manage ADSL lines. Subsequently I became technical lead for Alcatel's payment platform.
Technology keywords: CLOS, VHDL, ADSL, MPEG, SNMP, CORBA, EJB, XSLT, WebLogic, C, Struts, Tomcat, JSP.