

Pieter Beyens
Freelance software engineer

pieter.beyens@bytelead.be
0032(0)486/66.25.67
driving license A/B
7 oct 1976, Belgian

Bytelead bvba
Gustaaf Peetersstraat 20
B-2520 Broechem
BTW BE 0839.312.195
<http://www.bytelead.be>

- Experience**
- | | |
|------------------------------------|----------------|
| Freelance Software Engineer | Sep 2011 - Now |
|------------------------------------|----------------|
- Bytelead bvba, Broechem
Consultant at next customers:
- *GRAMMER EIA Electronics*, Aartselaar (Jan 2012 - Now)
 - software lead of high-end IO controller for combines, tractors etc.
 - SIL-compliant controller for use in safety critical applications e.g. control of hydraulic valves
 - Freescale Qorivva PPC board (MPC5674F), Green Hills Integrity (Safety) RTOS, C, C++
 - *EIA Electronics*, Aartselaar (Sep 2011 - Dec 2011)
-
- | | |
|-----------------------------------|---------------------|
| Embedded Software Engineer | Mar 2005 - Aug 2011 |
|-----------------------------------|---------------------|
- Sioux Embedded Systems NV/SA, Herentals
Consultant at next customers:
- *EIA Electronics*, Aartselaar, 2y+
 - rugged, die-hard, CAN devices such as handles, displays, controllers, arm-rests etc. especially for agriculture
 - 2 platforms: high-end Linux platform (ARM, Intel, PPC) and low-end OS-less ARM-based NXP lpc2xxx platform
 - sw architect of low-end platform: driver model, drivers (SPI, watchdog etc.), libraries, regression testing
 - development of ISOBUS on Linux platform: extension of socket family PF_CAN with J1939 (Linux socket layer), autobuild system
 - project manager of ISOBUS Virtual Terminal development
 - Linux, GCC toolchain, C/C++, Assembler, Python, SVN, GNU tools
 - *Thomson*, Edegem, 1.5y
 - part of networking team of triple-play (voice, data, video) DSL routers
 - implementation of VPN/IPsec solutions: cryptographic HW acceleration, redundancy / load-balancing
 - reservation of connections to guarantee QoS for Voice
 - Linux, RTEMS, Rational ClearCase, Rational ClearQuest

- *Cisco (Scientific Atlanta)*, Kortrijk, 2y
 - embedded software for digital TV streamers
 - development of Linux networking driver
 - realization of various networking protocols: VLAN, IGMPv2, SNMP
 - redesign of streamer multiplexing core: FPGA control, OO, refactoring
 - Montavista Linux, pSOS, C/C++, GNU tools, UML, OO, refactoring, Microsoft SourceSafe, CVS

PhD student

Oct 2003 - Mar 2005

Vrije Universiteit Brussel, Brussels

- research on wireless sensor networks
- 3 international papers, presentations in Liverpool, Istanbul and Gent
- development of learning algorithms for MAC and routing with compressing
- teacher in internet technology (routing, DNS, PHP), coaching of thesis and project students
- development in C++ and Java discrete event simulators (ns-2, omnet++, J-Sim)
- Linux, Mac OS X, C++, Java, Python, GNU tools

Advisor IT

Aug 2002 - Sep 2003

Erasmus hogeschool Brussel, Brussels

- responsible for ICT and ICT innovation in education
- maintenance of Windows 2000 network
- trainer of e-learning software
- Windows 2000, Linux, Ms Sql server, e-learning software (Blackboard, Perception)

Software Engineer

Oct 2000 - Aug 2001

Tinc Associates, Mechelen

- projects for aviation industry
- Eurocontrol project: CORBA-based flight server
- Belgocontrol project: interfacing between flight server and the operator GUI (TCP/IP stack)
- Linux, Windows 98, C++, Borland C++, Qt, Rational Unified Process

Courses Seminars	Feb 2011	Basic course electronics (self-study)	
	Nov 2010	Certified Scrum Master (2 days)	
	Sep 2010	Requirements Engineering (2 days)	
	Mar 2010	Software Architect (4 days)	
	Jul 2008	Project management met PRINCE2: Foundation training (3 days) + certification	
	Apr 2008	Erlang and multi-core systems (3 days)	
	Dec 2007	GSM Essentials (2 days)	
	Sep 2007	Learning Internet and Intranet Security Fundamentals (3 days)	
	Dec 2006	IPv6 Essentials (1 day)	
	Oct 2006	Programming in Java (30 hours)	
	Sep 2006	UML 2.0 (1 day)	
	Jan 2006	MontaVista Linux EMB510/EMB530 (5 days)	
	Nov 2005	UML 2.0 (1 day)	
	Jun 2005	Experience Agile (3 day)	
	Mar 2004	Cisco Catalyst (1 day)	
	Certificates	Nov 2010	Certified Scrum Master
Jul 2008		PRINCE2 Foundation	
Jun 2007		Cisco INTRO (640-821)	
Oct 2006		OMG-Certified UML Professional (OMG-101103)	
Knowledge	<u>OS (dev):</u>	Linux, RTEMS, FreeRTOS, PSOS, ARM7 system without OS	
	<u>OS (use):</u>	Linux, Mac OS X, Microsoft Windows	
	<u>Languages:</u>	C/C++, Assembler, Java, Bash, Python, Erlang, Lisp, PHP...	
	<u>Methods:</u>	Unified Process, Extreme Programming, OOA/OOD, UML, design patterns / refactoring	
	<u>SW Tools:</u>	GNU tools, wireshark, CVS/SVN, Rational tools (e.g. Rose, ClearCase), Microsoft tools (e.g. Visio, Office)	
	<u>HW Tools:</u>	Cisco Catalyst, Ixia, Smartbits, JTAG debugging (e.g. Lauterbach), logical analyzer	
	<u>Other:</u>	datacom (ethernet, tcp/ip etc.), CAN (J1939, ISOBUS), MPEG-2	
Education	Master in Computer Science, great distinction, <i>Vrije Universiteit Brussel</i>	1999-2001	<ul style="list-style-type: none"> • Research thesis (Evolutionary Transitions), greatest distinction
	Bachelor in Computer Science, <i>Rijksuniversiteit Centrum Antwerpen</i>	1996-1999	
	Bachelor in Biology, distinction, <i>Rijksuniversiteit Centrum Antwerpen</i>	1994-1996	
Language Skills	Dutch	mother tongue	
	English	good	
	French	basic	
Hobbies	whitewater kayaking, Go, traveling (e.g. Asia 2001-2002)		