

Curriculum vitae

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| Name | dr. Nelis Boucké |
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| Date of birth | 12 March 1982 |



Profile summary:

- Analytical and fast-learner.
- Excellent communicative skills and a team player.
- In-depth knowledge of the latest architectural principles, practices and technologies.
- Ability to connect architectural reasoning with concrete implementations and technologies.
- Certified TOGAF 9 Professional.
- Experience in different domains (automation, logistics, smart grids, e-health, traffic).

I have a passion for architecting software systems. I search for no-nonsense solutions aligning business needs with software technology through an in-depth understanding of the problem domain. I easily break in new domains, technologies and challenges with a constructive approach to problem solving.

Professional achievements:

12/2010-Present: **Co-founder and CTO of archiwise.com**

- Together with Alexander Helleboogh, I've been involved in many industry projects and research activities on software architecture. We share a passion for architecting software systems and for practices that improve software quality. We founded **archiwise**, a specialized spin-off company that provides customers with architectural services and consulting.

11/2009-Present: **Senior Researcher** at DistriNet, K.U.Leuven, Belgium

- ESPLS project (2009-Present), with Egemin N.V. Key realizations include:
 - My role:
 - software architect/technical lead
 - analyze main architectural challenges w.r.t. software quality and evolution
 - design and build a tool to automatically reconstruct and verify the architecture of legacy systems and to support software updates
 - reduced the time needed for updates with 35%, improved correctness of updates from 72% to more than 99%
- Powermatcher and smart grids (2010), evaluation commissioned by Sony Belgium. I supervised an evaluation of the PowerMatcher in the context of smart grids.

- Industry course on Software Architecture and ISO 42010 (2009) for architects from industry. I was one of the organizers and lecturers.
- Other tasks include:
 - Reviewer of the ISO 42010 standard on architectural description.
 - Day to day supervision of three PhD students.
 - Assisting applications for funds through projects (FWO, IWT).
 - Organizing events, like international workshops and industry courses.
 - International cooperations and lectures on international conferences.
 - Designing, programming and maintaining multiple software systems to support the research.

09/2004-10/2009: **PhD Researcher** at DistriNet, K.U.Leuven, Belgium

- EMC2 project, in cooperation with Egemin N.V.
 - I co-organizing and served as evaluator for an ATAM (Architectural Trade-off Analysis Method) and assisted in developing a distributed control system for automatic guided vehicles.
- Other tasks include:
 - International cooperations and lectures on international conferences.
 - Teaching and supervision

Education:

- 2010: **Certified TOGAF 9 Professional**, The Open Group
- 2010: **Business training (iStep)**, Vlerick Leuven-Gent Management School and IBBT
- 2010: **Secure Application Development** by SecAppDev, partnering with the K.U.Leuven and Solvay Business School
- 2004 – 2009: **Ph.D. Applied Sciences and Engineering: Computer Science** at K.U.Leuven, Belgium.
 - Phd subject: Composition and relations of architectural models supported by an architectural description language. Funded by the Institute for the Promotion of Innovation through Science and Technology in Flanders (IWT-Vlaanderen).
- 2000 – 2004: **Master in Informatics** at K.U.Leuven, Belgium
 - Master thesis subject: Situated multi-agent approach for distributing control in automatic guided vehicle systems. In cooperation with Egemin N.V., a logistic systems provider.
 - Graduated Magna Cum Laude.

Community activities:

As I am passionate about software architecture, I invest time and effort to stay up to date with the latest innovations and regularly give presentations:

- Organizer and lecturer of events on architecture
 - International Workshop on Variability in Software Product Line Architectures ([VARI-ARCH](#)) at ECSA 2010, Copenhagen.
 - [Industry course](#) about the ISO 42010 standard on architecture descriptions (2009), Leuven.

- Architecture conferences this year:
 - [Software Architect](#) 2010, London
 - [ECSA](#) 2010, Copenhagen
 - [WICSA](#) 2009, Cambridge
- My [articles](#) about software architecture in scientific venues.

Knowledge of languages:

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|-------------------------|-------|----------------------|
| Dutch (native language) | ***** | native language |
| English | ***** | daily use since 2004 |
| French | ** | basic |

Knowledge of Technologies:

I have always stayed in touch with the trends in ICT technology, allowing to quickly pick-up and/or evaluate new technologies. Some of the technologies I worked with during my career include:

- **Software and Enterprise Architecture:**
 - ATAM architecture evaluations, TOGAF, CMMI, Service Oriented Architectures, Product-line Architecture, Web services, Viewpoints, ISO 42010 on System and Software Engineering, Enterprise Application Integration Patterns, Software Qualities, ...
- **Design:**
 - Object Orientation, UML, Use-Cases, component-based design, OO design patterns, database design, ...
- **Processes:**
 - UP, Agile, basic Scrum, TDD, ...
- **Languages & technologies:**
 - Java, AspectJ, .Net including C# and Visual Basic, basic C/C++, basic Haskell, PHP, basic Asp, HTML, XML, CSS, SQL, MySQL, JDBC, basic Python, basic J2EE, EMF, Eclipse Plugins, DLL dependencies analysis, ...
- **Development tools:**
 - Eclipse, NetBeans, Visual Studio, CVS, SVN, Mercurial, git, Team Foundation Server, Trac, Maven, ...
- **Operating systems:**
 - Windows, Linux, Mac OS X, including basic administrative tasks and scripting.

Combining deep knowledge of technologies with architectural reasoning is one of my priorities while architecting a system, as I believe that the strengths and limitations of technologies have a profound influence on the feasibility of an architecture. I feel comfortable coding when required.