Curriculum Vitae

Name Dr.ir. Alexander Helleboogh

Address Bruineveld 132A, 3010 Kessel-Lo

Nationality Belgian

Telephone +32 (0)486/88 41 36

E-mail <u>alexander.helleboogh@archiwise.com</u>

Time of birth January 21st, 1978



Profile:

- Excellent communication & people management skills
- In-depth knowledge of the latest architectural principles, practices and technology
- Certified SEI Software Architecture Professional & ATAM Architecture Evaluator
- Experience in different domains (automation, logistics, e-health, traffic, finance)
- Broad technical background and design expertise

I have a passion for architecting software-intensive systems, which requires a combination of communication skills, commercial feeling, design expertise and broad technical background. As an architect, I also strive to transfer knowledge that improves the architectural practice of people and organizations I work with.

Professional achievements:

12/2010-Present: Co-founder & CEO of archiwise.com

Together with Nelis Boucké, 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.

06/2007-Present: **Senior Researcher at DistriNet labs**, Dept. of Computer Science, K.U.Leuven

- Industry collaborations
 - E'SPLS project (2009-present), in collaboration with **Egemin**
 - My role:
 - technical lead of the project
 - analyze main architectural challenges w.r.t. software quality and evolution
 - design 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%
 - · Technical context: .NET, XML, Java

- DiCoMAS project (2008-present), in collaboration with Ordina, Tinc, Televic, UZ,
 Saga, Eurad
 - My role:
 - design an architecture for automated collaboration between business processes in a supply chain context
 - coach a team of 5 people to build a prototype that supports a 4th party logistics provider
 - Technical context: Java, Web Services
- Flexsys project (2007-2008), in collaboration with Vialis, Traficon, T&M, Tritel,
 Vlaams Verkeerscentrum, Touring
 - My role:
 - design an architecture for flexible traffic management systems that integrates the systems of multiple vendors
 - · Technical context: DATEX2, XML

10/2001-05/2007: **PhD Researcher at DistriNet labs**, Dept. of Computer Science, K.U.Leuven

- Industry collaborations
 - e-HIP project (2005-2008), in collaboration with Agfa, Cronos, UZ Leuven, Medibridge
 - My role
 - analyze the availability and performance of a next-generation e-health platform
 - propose architectural techniques to improve these qualities
 - Technical context: J2EE
 - EMC2 project (2004-2006), in collaboration with **Egemin**
 - My role
 - design a simulation environment to test distributed control systems for warehouse automation
 - Technical Context: Java, AspectJ

Education & Certification:

- •2010: Certified ATAM (Architecture Tradeoff Analysis Method) Evaluator Software Engineering Institute (SEI), Carnegie Mellon University, USA
- 2008: Certified SEI Software Architecture Professional Software Engineering Institute (SEI), Carnegie Mellon University, USA
- •2001-2007: Ph.D., Applied Sciences and Engineering: Computer Science K.U.Leuven, Belgium

Subject: "Simulation of distributed control applications in dynamic environments"

•2003-2005: Bachelor, Philosophy

K.U.Leuven, Belgium

Graduated Cum Laude

• 1996-2001: Master, Applied Sciences and Engineering: Computer Science K.U.Leuven, Belgium

Graduated Magna Cum Laude

Subject: "A configurable electronic stock market agent: framework and prototype" Laureate of the 2001 <u>Jos Schepens Memorial Fund</u> Award

Community Activities:

As I am passionate about architecture, I invest time and effort in the architecture community:

- Organizer and lecturer of events on architecture
 - International Workshop on Variability in Software Product Line Architectures (VARI-ARCH) at ECSA 2010, Copenhagen.
 - <u>Industry course</u> about the ISO 42010 standard on architecture descriptions (2009), Leuven.
- · Attending key architecture conferences, including the last editions of:
 - Software Architect 2010, London
 - ECSA 2010, Copenhagen
 - WICSA 2009, Cambridge
- I have written several articles about software architecture in scientific venues

Knowledge of languages:

Dutch ****** native language

English ***** fluent, daily use since 2003

French ** basic

Knowledge of ICT Technology:

During my career I have used a wide range of ICT technologies, including:

- Software & Enterprise Architecture:
 - ATAM Architecture Evaluations, Adaptive Architectures, Product-Line Architectures, Service Oriented Architectures, EAI, Architecture Viewpoints, ISO 42010 Architecture Descriptions, Quality Attributes, basic TOGAF
- · Design:
 - UML, OO Design & Design Patterns, Component-Based Design, Use Cases, ERD
- Development Processes:
 - UP, Agile, basic Scrum, TDD
- Programming Languages & Technologies:
 - Java (J2SE), AspectJ, basic J2EE, JDBC, EMF, .Net including C# and Visual Basic, basic C++, basic Haskell, HTML, XML, SQL
- Operating systems:
 - Windows, Linux, Mac OS X

Given my experience in and connections with the research community, I stay in touch with new trends which allows me to quickly pick-up and/or evaluate new technologies.