# **Kristof Riebbels**

## Senior Software Architect | Azure Developer Associate | Certified Scrum Master

Belgium (Zele) | Email: riebbels.kristof@itkriebbels.be LinkedIn: linkedin.com/in/kristofriebbels | GitHub: github.com/kriebb | www.itkriebbels.be

## **Professional Profile for Infrabel**

Senior .NET Developer with 17+ years experience evolving from developer to architect, focusing on maintainable, secure software architectures. At Xebia, I've helped implement distributed backend architectures for clients like AXA Belgium, integrating complex systems (AuthO/Itsme/Backend services, EIP, APIM) while maintaining security standards through pentests and security reviews. My approach combines collaborative implementation with hands-on expertise - I work with solution architects to bring designs to life, often improving implementations through team collaboration and practical development experience.

# **Project Highlights**

- Enterprise Authentication System (AXA Belgium): Led implementation of Auth0 with Itsme integration using distributed backend architecture, Azure AppServices, APIM, and KeyVault. Learned and adapted from multiple security reviews and pentests to continuously improve security standards.
- OIDC Mocking Framework: Developed an opensource tool for integration testing with id/access tokens (github.com/kriebb/ MockOpenIdConnectIdpAspnetcore) that was adopted at AXA, demonstrating practical solutions over theoretical perfection
- ERP System Modernization: Part of team that redesigned legacy system (DB2/COBOL/FORTRAN) to SQL Server/WCF/.NET using Domain-Driven Design with state machines for order processing, focusing on delivery rather than getting lost in architectural abstractions

# **Skills Matrix for Infrabel Requirements**

| Technology<br>Category                | Basic<br>Knowledge              | Experienced   | Advanced   |
|---------------------------------------|---------------------------------|---|--|
| Architectur<br>e &<br>Developme<br>nt | Enterprise<br>Architect         | Software<br>Architecture<br>(Implementation<br>)<br>Mermaid<br>Diagrams | C#/.NET (17+<br>years)<br>OOP Patterns<br>IOC/DI*          |
| Services & APIs                       | WebLogic<br>Server              | Azure App<br>Service<br>Kestrel   | REST APIS<br>SOAP/WCF/WSDL<br>XML/XSD/XSL<br>JSON<br>IIS   |
| Messaging<br>&<br>Integration         | IBM MQ<br>RabbitMQ<br>Hazelcast | Azure Service<br>Bus<br>Redis   | MSMQ   |
| Data Access                           | DevArt<br>dotConnect            | Dapper  | Entity Framework<br>Core                                   |
| Testing & Quality                     |                                 |   | TDD Unit Testing CI/CD**                                   |
| DevOps &<br>Infrastructu<br>re        | OpenShift<br>ProGet             | Docker<br>SSH<br>TeamCity   | Azure DevOps<br>MSBuild<br>Azure Artifacts**<br>Git/GitHub |
| Scheduling & Workflows                |                                 | Azure Functions<br>Logic Apps<br>Hangfire                               |  |
| Project<br>Manageme<br>nt             | JIRA                            | Certified Scrum<br>Master   |  |

<sup>\*</sup> IOC/DI: Dependency Injection with Autofac, Unity, Microsoft DI

<sup>\*\*</sup> CI/CD: Continuous Integration/Delivery with Azure DevOps, Azure Artifacts, TeamCity

## Languages

- Dutch: Native (C2 level)
- English: Professional working proficiency (reading, writing, speaking)
- French: Basic proficiency (reading/listening only) -Below B2 level required for position

## **Certifications**

- Microsoft Certified: Azure Developer Associate (AZ-204)
- Certified Scrum Master (Scrum.org)
- Bachelor in Informatics (HoGent, Ghent)

## **Value Proposition for Infrabel**

As someone with extensive experience implementing and collaborating on architecture, I bring a combination of technical depth and team collaboration skills that would benefit Infrabel's railway management systems:

- Collaborative Implementation: I excel at working with architects and teams to translate architectural designs
  into effective implementations
- **Security-Focused:** My experience implementing authentication systems ensures security requirements are properly executed
- Continuous Improvement: I help identify ways to enhance existing architectures based on practical implementation experience
- Team Approach: I believe the way of working must work for a team to ultimately work for the company
- Pragmatic Implementation: I balance following architectural guidelines with practical delivery, ensuring systems not only meet design specifications but can be maintained long-term

## **Relevant Experience**

Xebia XMS BE 04/2022 – Present

#### Software Architect

• Implement distributed backend architectures for enterprise clients, collaborating on architectural decisions and documenting with Mermaid diagrams

- Work with solution architects on Auth0/Itsme integration at AXA Belgium, translating architectural decisions into implementations using OOP principles and dependency injection
- Collaborate on security architecture implementation working with JWT tokens, Azure KeyVault, OAuth flows, and Active Directory
- Implement workflow scheduling solutions for distributed systems using Azure Functions, Logic Apps, and Service Bus topics/queues
- Configure CI/CD pipelines in Azure DevOps leveraging MSBuild, Azure Artifacts, and automated testing
- Implement development standards using IoC/DI containers, unit testing frameworks, and TDD methodologies
- Configure monitoring solutions with Application Insights following architectural guidelines
- Follow and improve upon architectural patterns for secure SSH access between environments

**RecoMatics** 04/2017 – 04/2022

### Solution Engineer

- Made architectural contributions on the service-oriented architecture implementation for Vycunia (SaaS product)
- Implemented architectural patterns for data access and messaging using repository pattern, unit of work, and message queue abstractions
- Contributed to architectural documentation including coding standards, architectural principles, and system integration patterns
- Implemented microservices approach for new features following established service boundaries and communication contracts in XSD/JSON Schema
- Implemented secure token-based authentication flows between SharePoint, Dynamics 365, and custom services
- Helped develop workflow scheduling implementation using Azure Service Bus topics/subscriptions and Azure Functions
- Implemented XML/XSL transformation layers for data integration between legacy and modern systems
- Set up CI/CD pipelines implementing agreed branch policies, quality gates, and deployment strategies

**Febelco** 05/2010 – 05/2014

#### Senior Software Developer with Architectural Contributions

• Contributed to architecture implementation for ERP system modernization, collaborating with team on translating business requirements into technical solutions

- Implemented N-tier architecture following established patterns for cross-layer communication using DTOs
- Applied dependency injection patterns in implementation, ensuring consistent application of IoC principles
- Implemented data access architecture using repository and unit of work patterns with NHibernate as the ORM solution
- Built service communication implementations using WCF, contract-first design, and message validation
- Implemented task scheduling architecture for automated business processes using state machines and MSMQ for reliable message delivery
- Applied transaction handling patterns across distributed system components
- Implemented testing architecture following defined unit, integration, and system testing strategies and frameworks
- Created JSON/XML data transformation implementations for integration with external systems and reporting solutions

References available upon request | Full CV at www.itkriebbels.be/resume