



## Micael Carlstedt

Developer since 2001

*"An engaged software developer and group lead that with positive attitude, flexibility and knowledge creates a great working environment for his colleagues and customers. He is a structured pragmatist that gets things done."*



### Summary

Micael has been working with software development since 2001. He has been working within the defense industry, the building automation industry, finance sector and telecom. Micael has during this time worked as software developer, team lead, technical lead, architect, lead developer and scrum master.

Micael is an engaged software developer and group lead with positive attitude, flexibility and knowledge. He creates a great working environment for his colleagues and customers. He is a structured pragmatist that gets things done.

Micael likes to share his knowledge and experience by doing various presentations and workshops for colleagues and customers. He strives to learn something new every day, since he is of the mindset that a day that passes without acquiring new knowledge is a wasted day.

Micael lives with his family in Västra Hamnen in Malmö. His spare time is spent with family and friends.

### Competence and experience

- Developer / Lead developer
- Technical lead
- Architect
- Coach/Mentor of new developers
- BDD/TDD Coach
- Scrum master



## Technical areas

Languages	C#, Python, XAML, Java, C++, Javascript
Frameworks /Libraries	.NET Core, ASP.NET Core WebAPI, .NET, ASP.NET WebAPI, Azure Service Fabric, Azure Service Bus, Azure Event Hubs, WCF, OData/WCF Data Services, MVVM Light, WPF, Silverlight, Winforms, ADO.NET Entity Framework, NHibernate, Dapper, Nancy, NServiceBus, MQTT, RabbitMQ, Poco(C++), Boost(C++), COM/DCOM
Architecture	Microservices, Enterprise Integration Patterns, IoC/Dependency Injection, MVVM, Model View Presenter, Repository Pattern
Unit testing	nUnit, xUnit, CppUnit, MsTest, jUnit
Continuous integration	Azure DevOps, Jenkins, TeamCity, Bamboo, CruiseControl.NET, TFS 2010
Integration testing	SpecFlow, Fit-framework using Fitnesse, NUnit, MsTest, NDbUnit, Python unittest
Tools	Visual Studio Code, Visual Studio, Resharper, Expression Blend, NCover, FxCop, MSBuild, Maven
Versioning	Git, Mercurial, TFS 2010, Subversion, ClearCase
Databases	SQLServer, Neo4j Graph Database, Postgresql, MongoDB
IoC frameworks	StructureMap, Unity, Ninject, Autofac
Methods	Agile methods, Kanban, GitHub Flow, BDD, TDD, Scrum
BDD tools	SpecFlow, Fit-framework using Fitnesse
OS	Windows, Linux, Windows Phone 7 & 8
Platforms	Docker, Microsoft Azure, Azure Service Fabric, Amazon Web Services (AWS)



## Example of contracts

### CDON

(april 2018 – july 2019)

Micael was during this assignment in different roles such as developer and scrum master.

- Micael developed a new version of the company's product import that is used by merchants to import their products into the CDON Marketplace. The solution was implemented in Microsoft Azure and is running in Azure Service Fabric and using e.g. Azure Event Hubs and Azure Service Bus.

Technologies: .NET Core, Python, Azure Service Fabric, Azure Service Bus, Azure Event Hubs, Azure Application Insights, Azure Key Vaults, Ocelot API Gateway, Polly, ARM templates, REST, XSD, Autofac, nUnit, Git, ARM templates, Powershell, Azure DevOps.

### SuzoHapp

(February 2016 – present)

Micael was during this assignment in different roles such as architect, scrum master, developer and mentor/coach.

- Micael developed a product that connects Suzohapps machines in a cloud based solution to handle transaction data and machine status to enable aggregation, reporting and notifications.

Micael is one of the architects behind the solution and the lead developer for the products public REST API and the middleware consisting of a SOA based (more specifically microservice based) architecture where an ESB is included for e.g. data transformations message routing. On the ESB, several microservices is loosely coupled via their REST APIs and a message broker (RabbitMQ). The microservices is primarily written in Java but some is written in Python. The integration tests are written in Python.

Micael has dockerized the solution including the API Gateway, ESB, Microservices and the MessageBroker.

- Micael has been the architect, scrum master and lead developer in a project for developing an Android application where a REST API was the deliverable for the Swedish team and the Android application was developed by an outsourced team. The API was written in .NET Core WebAPI. Integration testing was made using JMeter.
- Micael have also done investigations of legacy systems to evolve it into a new modern architecture. As a result, a proof of concept was implemented that used a microservice based architecture with a service bus at its core named NServicebus. The microservices was implemented in .NET Core.



Technologies: .NET Core, Python, Docker, Java, MQTT, RabbitMQ, NServicebus, REST, NUnit, JUnit, JMeter, Git, Postgresql, MongoDB, Solr, Bitbucket, Jenkins, Powershell, Maven, WSO2 API Manager, WSO2 Enterprise Service Bus, Sitewhere IOT, Windows , Linux, AWS, Angular, Typescript, JIRA

### Øredev 2015 – Windows Phone applikation

(September 2015 - October 2015)



Micael and two of his Webstep colleagues delivered for the second year in a row the conference application that 2012 became the official Windows Phone conference application. Link to Windows Phone Store: <https://goo.gl/CyNVhl>

Technologies: C#, XAML, Silverlight, MVVM, MVVM Light, Windows Phone SDK 8.0, NUnit, Mercurial

### ScanCoin AB

(September 2014 – January 2016)

Micael was scrum master/lead developer/senior developer/mentor/coach in ScanCoin AB.

He worked with a system for planning, tracking and tracing transportation of cash and valuables.

To implement the product, he used amongst other the MVC 4 framework. NHibernate was used as ORM.

Micael moved their source code from Subversion to Git and pushed through a process change into a pull request / review based workflow. He also led the work to introduce automatic unit- and system integration tests into the process and built their Continuous Integration environment.

Micael helped the customer to enhance their software team's workflow to enable the team to collaborate and deliver software of great quality.

Technologies: C#, ASP.NET MVC4, WebApi, REST, Structuremap, NUnit, Git, Javascript, NHibernate, SQLServer, SQLServer LocalDb, IIS7, OWIN(Katana), Bamboo, Powershell, MSBuild, JIRA

### Øredev 2014 – Windows Phone application

(September 2014 - October 2014)



Micael and three of his Webstep colleagues delivered for the second year in a row the conference application that 2012 became the official Windows Phone conference application. Link to Windows Phone Store: <https://goo.gl/Kun519>

Technologies: C#, XAML, Silverlight, MVVM, MVVM Light, Windows Phone SDK 7.1, NUnit, Mercurial



## Telenor DK

(February 2014 – September 2014)

Micael was a senior developer at Telenor MVNO, a department of Telenor that implemented a platform for MVNO (Mobile Virtual Network Operator). For the implementation of the platform, MVC 4 with Razorview as view engine, was used. NHibernate was used as ORM. During the assignment the work began to move to a microservice based solution. The functionality was specified using SpecFlow features. The projects were performed according to Kanban in a GitHub Flow with the aid of AgileZen.com and Github.com. Continuous Delivery were used.

Technologies: C#, ASP.NET MVC4, BDD/Specification by Example, SpecFlow, Structuremap, Nancy, Autofac, xUnit, Git, GitHub Workflow, NHibernate, SQLServer, IIS7, TeamCity

## Solid Insurances (Solid Försäkringar AB)

(September 2013 - February 2014)

Micael was a senior developer at Solid, which is an insurance company based in Helsingborg. He developed their webservice and web applications for handling the management of the insurance products the company offers. Systemet byggs på .NET och AS400.

Technologies: C#, ASP.NET WebAPI, ASP.NET MVC4, Ninject, NServiceBus, NUnit, Mercurial, Dapper, SQLServer, SSIS, IIS7, TeamCity

## Øreddev 2013 – Windows Phone application

(September 2013 - October 2013)



Micael and three of his Diversify colleagues delivered for the second year in a row the conference application that 2012 became the official Windows Phone conference application. Link to Windows Phone Store: <http://goo.gl/Wt7zvk>

Technologies: C#, XAML, Silverlight, MVVM, MVVM Light, Windows Phone SDK 7.1, NUnit, Mercurial

## Telenor DK

(January 2013 – July 2013)

Micael was a senior developer at Telenor MVNO, a department of Telenor that implemented a platform for MVNO (Mobile Virtual Network Operator). For the implementation of the platform, MVC 4 with Razorview as view engine, was used. NHibernate was used as ORM. The functionality was specified using SpecFlow features. The projects were performed according to Kanban in a GitHub Flow with the aid of AgileZen.com and Github.com. Continuous Delivery were used.

Technologies: C#, ASP.NET MVC4, BDD/Specification by Example, SpecFlow, Structuremap, xUnit, Git, GitHub Workflow, NHibernate, SQLServer, IIS7, TeamCity



## Saxo Bank A/S

(January 2012 – December 2012)

Micael was a senior developer in a project where the banks different API would be gathered under a new open API. This was built as a RESTful webservice solution where the goal was to be a level 3 service according to the Richardson maturity model where HyperMedia is used to alter the state of the application. The functionality was implemented with BDD by using a framework named SpecFlow. The project was agile driven with Scrum. Micael also implemented a Windows application to enable manual testing of the projects developed API.

Technologies: C#, REST, ASP.NET WebAPI, SpecFlow, MVVM, XAML, MVVM Light, IIS7, Unity, MsTest, TFS 2010, SQLServer

## Øredev 2012 – Windows Phone application

(October 2012)



Micael and five of his Diversify colleagues created the conference application which won the competition for best Windows Phone application for Øredev 2012 and hence became the official Windows Phone conference application. Link to Windows Phone Store: <http://goo.gl/bi3kw>.

Technologies: C#, XAML, Silverlight, MVVM, MVVM Light, Windows Phone SDK 7.1, NUnit, Mercurial

## Nilex AB

(December 2011 – January 2012)

Micael evaluated an existing RIA solution. The evaluation covered both the high level architecture and the implementation but the focus was on the Silverlight part of the implementation. After an action plan had been created, Micael carried out necessary improvements.

Technologies: C#, Silverlight, MVVM Light, RIA, WCF, ASP.NET, IIS7, StructureMap, MsTest, TFS 2010

## Myxa Solutions AB

(April 2011 - October 2011)

Micael was developer and architect in this project where he worked with the serversolution where a dataservice was implemented with a domainmodel that had a spatial connection. The solution was developed for Windows Azure. He also introduced Continuous Integration on TFS 2010. Micael wrote unit tests and end-to-end integration tests using MsTest.

Technologies: C#, WCF, OData/WCF Data Services, ADO.NET Entity Framework, ASP.NET MVC3, IIS7, SQLServer 2008 R2, SQL Spatial, Windows Azure, SQL Azure, Windows Azure Storage, Neo4j Graph Database with spatial extension, Structuremap, MsTest, NDbUnit, TFS 2010





### **Project Configuration Server, Schneider Electric Buildings AB**

(May 2010 – April 2011)

Micael was Technical Lead in this project that developed a Project Configuration Server with offline engineering capabilities in a product named StruxureWare. As technical lead he led the technical work in the project which included design/architecture but also the day-to-day technical work including e.g. TDD coaching, code reviews, retrospectives. Micael wrote unit tests in NUnit and CppUnit. He used NUnit and Fitnesse for integration testing and acceptance testing.

Technologies: C#, WPF, C++, Poco, NUnit, CppUnit, Fitnesse, Subversion

### **Enterprise Engineering, Schneider Electric Buildings AB**

(August 2008 – May 2010)

Micael was a software developer in the project that introduced multiserver support, data bindings, search and offline engineering into a product named StruxureWare. Micael was Team Lead for the offline engineering team. That roles work meant to be responsible for also the day-to-day technical work including e.g. TDD coaching, code reviews, retrospectives. Micael wrote unit tests in NUnit and CppUnit. He used NUnit and Fitnesse for integration testing and acceptance testing.

Technologies: C#, WPF, C++, Poco, NUnit, CppUnit, Fitnesse, Subversion

### **LonWorks, Schneider Electric Buildings AB**

(June 2007 – August 2008)

Micael was a lead client software developer in the project that introduced the LonWorks protocol a product named StruxureWare. Micael wrote unit tests in NUnit and CppUnit. He used NUnit and Fitnesse for integration testing and acceptance testing.

Technologies: C#, WPF, C++, Poco, Boost, NUnit, CppUnit, Fitnesse, Subversion

### **TAC Graphics, Schneider Electric Buildings AB**

(August 2005 – October 2006)

Micael was a software developer in this project that developed a proprietary dynamic graphicsformat called TGML(TAC Graphics Markup Language) with belonging viewers/renderers and graphics editor. The GraphicsEditor was developed in C#/Winforms while viewers was implemented using both C#/GDI+ and Java/Java2D. The graphics engine was developed using Java. Micael wrote unit tests in NUnit and JUnit.

Technologies: C#, Winforms, GDI+, Java, Java 2D, NUnit, JUnit, SourceSafe

### **CATS STA (Combat Training Facility), C-ITS AB**

(August 2003 – August 2004)

Micael was a software developer in the project that developed a simulator used for combat training.

This simulator had the purpose to train soldiers for combat and hence laser sensors and laser transmitters was connected to the soldiers and their



weapons. The soldiers actions(e.g. hits, rounds fired) was logged and could later be shown in the software. Much like Laserdome, but of course more advanced. The equipment was connected to the system so that the simulation could be tracked and to enable replay of events during evaluation after completed simulations.

The technical solution was based on a client-server architecture with distributed servers where different clients could be connected; A client to handle the actual simulation and a client to show a 3D view of the current position.

Technologies: C++, COM/DCOM, MFC, ClearCase

## Examples of knowledge sharing

### **Presentation/Lab: Apache Cordova**

(Malmö, November 2015)

### **Presentation: REST and RESTful webservices**

(Örenäs castle, Mars 2014)

### **Presentation: Behavior-driven development**

(Barcelona, October 2013)

### **Presentation: Behavior-driven development (BDD) with SpecFlow**

(Malmö, Maj 2013)

### **Presentation: Neo4j – a graph database**

(Malmö, November 2012)

### **Presentation: Developing for Windows 8 (with C# )**

(Malmö, September 2012)

## Education and certifications

- Software architecture for developers, Simon Brown 2014
- Accelerated Agile: from months to minutes, Dan North, September, 2013
- LEAP – Lead Enterprise Architect Program, Microsoft, 2012
- Professional Scrum Master I, T2990 Certified ScrumMaster, Informator, 2011
- Microsoft Certified Technology Specialist, TS: Windows Applications Development with Microsoft .NET Framework 4, 2011





- Microsoft Certified Professional, Developing and Implementing Windows®-based Applications with Microsoft® Visual, 2005
- Bachelor of Science, Software Engineering, LTH, 1998 – 2001

## Employers

Micael Carlstedt Consulting AB	2016 – present
Diversify/Webstep AB	2010 – 2016
Schneider Electric Buildings AB	2004 – 2010
C-ITS AB	2001 – 2004