

# Niels Bijl

## Software engineer

### Personal data

Year of birth : 1989

Residence : Woerden

Nationality : Dutch

Driver's license : Yes

Email : info@nielsbijl.com

Phone : +316-23506405

### Languages

Dutch : Native language

English : Excellent

### Hobbies | Interests

- Hobby programming projects
- Cooking
- Gaming
- Watching series
- Puzzling
- Hiking
- Cycling
- Fitness

### Branch experience

- Gas & Oil industry
- Computer Hardware & Software
- Education
- Government
- Retail
- E-commerce
- Finance

### Professional summary

Niels is a driven software engineer with experience in front-end and back-end software development and also have a lot of experience in setting up a DevOps environment. For Niels software quality is very important and therefore he has a lot of experience with writing Unit tests, integration tests and automated UI tests.

Niels is a calm and stress-resistance employee who can also perform well under high pressure. He is good at discovering rules and relationships in complex information and is good in finding solutions. He is critical but is open to new ideas and suggestions. Thanks to his structured way of working, he listens to the customers' demands and ensures that the desired results are of high quality and are delivered within the specified time.

### Tools & Technologies

C#	SQL (MSSQL / MySQL / Oracle)
.NET Core / .NET 8	NOSQL (MongoDB / CosmosDB)
.NET MVC / WEB API	
gRPC	Test driven development
SignalR	XUnit / MS Test
REST / WCF	SpecFlow
WPF / WinForms	Selenium
WebForms	Cypress
Entity Framework	
Dapper	SCRUM
	DevOps
Angular / React	RUP
Typescript	
JQuery	Git
	Launch Darkly (Trunk based)
AWS	
Azure	Grafana
	Jaeger
HTML5	Elastic Search
CSS / SASS / LESS / Bootstrap	
Argo CD	Episerver
Docker / Microservices	Demandware
Kubernetes	Mobile
TFS / VSTS / Azure DevOps	
Jenkins	

## Education

- 2013**                    **Hogeschool van Amsterdam**  
Bachelor computer science  
Graduated cum laude
- 2009**                    **Nova College – Beverwijk**  
IT community college level 3 and 4

## Certificates

Microsoft MCSD: Web Applications  
Microsoft MCSD: App Builder  
Professional Scrum Master Level I  
Demandware Certified Developer

## Experience

**October 2022 - February 2024**

### **JEX – Software engineer**

JEX is a company that produces software for the flexible labor market. Employment agencies often use various inconsistent software solutions that are sometimes not even intended for the flexible labor market. This causes many problems and extra work. JEX aims to provide a comprehensive “one-stop-shop” software package, allowing for a much better and streamlined experience for these businesses.

In his role as software engineer, Niels was responsible for implementing a new planning tool. This tool is used to plan shifts and then to schedule employees on those shifts. The planning tool was one of the first applications built in the new microservice environment.

Niels also contributed to building a time registration system and an AFAS test service. The test service was used for the integration tests of the old “JEX Backoffice” system. Since Niels already had some experience in working in a microservice environment, he also gave several presentations on the use of gRPC, NOSQL, YARP and other solutions that could be used in the new landscape.

Niels' contributions played a crucial role in delivering the planning application on time for the pre-agreed deadline. The application is now also being put into use. Thanks to Niels, it is now possible to write integration tests for the “JEX Backoffice” application, using the new AFAS test service.

*Technologies: C#, .NET 8 Web API, gRPC, Angular / Typescript, MSSQL, MongoDB, Entity Framework, Docker, Kubernetes, XUnit tests, Cypress, DevOps (CI/CD Azure DevOps), Argo CD, Trunk based (Launch Darkly), Grafana, Jaeger, Elastic Search (logging), SCRUM, Git*

**September 2021 – September 2022**

### **Invers – Software engineer**

Invers is a software company that has a PSD2 license. With this license, Invers can get bank transactions from a user's bank account (after approval of the account owner). Invers then enriches this data and offers it on different web services. Companies using these services don't need to have a PSD2 license when using these services.

In his role as a software engineer, Niels was responsible for implementing a new API gateway, which is used in the new Cloud environment of Invers (Azure). The gateway is responsible for securing, routing and logging of incoming web requests to the different micro services. Niels also created services to manage customers and API keys. Next to these services Niels also made some standalone tools running on the current system that will help the support team to help customers faster when something goes wrong. For all these tools and services Niels also implemented the CI/CD environment and implemented all the automatic tests (unit, integration and UI tests).

Partly thanks to Niels, there is now a new Gateway available on the Cloud environment. This will make sure that all requests to the different micro services are secured and logged. With the customer management services it's also easy to manage customers and to add new customers. The support team now also has better tooling to help customers that still use the on-site systems.

*Technologies: C#, .Net 6 Web API, Angular / Typescript, Azure, MSSQL, CosmosDB, Entity Framework, Docker, 3Kubernetes, Dapper, XUnit tests, DevOps (CI/CD Azure*

*DevOps), SCRUM, Git.*

#### **March 2021 – August 2021**

##### **Zwijzen – Software engineer**

Zwijzen is a Dutch publisher of educational books and software for toddlers, preschoolers, and primary school students. The Zwijzen Educational Platform (ZEP) is a platform on which various educational applications from Zwijzen are built. In addition to maintaining the current applications, Zwijzen wants to migrate the applications to the Cloud (AWS) and implement several new applications.

In his role as software engineer, Niels was responsible for migrating the applications to AWS, helping with setting up the CI/CD environment and implementing new functionality in existing and new applications. The back-end consisted of various REST services and web applications. The front-end consisted of older applications that used WebForms and MVB, and new applications that used React, among others. Niels also made several proposals for architectural improvements in the older applications.

Partly thanks to Niels, there is now a CI/CD environment for a large part of the applications and many of them run now on AWS. Existing software has also been expanded and, among other things, the applications for the SemSom teaching method have been added to the ZEP platform.

*Technologies: C#, .Net Web API, React, WebForms / MVC, AWS, Lambda functions, TypeScript, XSLT, MSTest, CI/CD Azure DevOps, SCRUM, Git*

#### **December 2020 – February 2021**

##### **Shoebly – Software engineer**

Shoebly is a Dutch retail chain selling fashion for women, men and children. Shoebly wants to make the work for the staff within the stores easier and better help the customers by using software solutions on tablets and phones for the store staff. This allows the amongst other things to quickly order something for the customer that is not in stock and they have a store circulation system with which they can send ordered products from the stock of the stores.

In his role as software engineer, Niels was responsible for the back-end of these systems. The back-end consisted of various REST services and Azure functions that communicate directly and indirectly via a servicebus. Niels contributed a lot to the architecture of these systems and has implemented the desired functionality.

Partly thanks to Niels, the customers in the stores can be served faster and the work for the store staff has become a lot easier and clearer.

*Technologies: C#, .Net Core Web API, React, Azure functions, MSSQL, Entity Framework, Azure, XUnit tests, DevOps (CI/CD Azure DevOps), SCRUM, Git*

**September 2019 – November 2020**

**Shell – Software engineer**

Shell works together with Baker Hughes on multiple software solutions. One of these applications is JewelSuite Subsurface Modeling. JewelSuite Subsurface Modeling is a modeling tool for the oil and gas industry. One of the teams that work on this application is the Sky team and they want to improve the cooperation of the end-users, improve the performance of loading the data from the database and they want to be able to install the application in AWS using Docker containers.

In his role as software engineer, Niels was responsible for implementing an import system between the different solutions inside the application, a version control system for the metadata, changing from a relational MSSQL database to MongoDB and for migrating part of the application to AWS using Docker.

Thanks to Niels, the application loads a lot faster by using a non-relational database, improved cooperation between end users, because it's much clearer if there are new versions available of the metadata and easier to import them and it's now possible to install the application on AWS using Docker containers.

*Technologies: C#, WPF, .Net Core Web API, MongoDB, MSSQL, Entity Framework, AWS, Docker, MSTest, Specflow, Azure DevOps (CI/CD), SonarQube, SCRUM, Git*

**September 2018 – August 2019**

**UWV – Software engineer**

UWV (Employee Insurance agency of Holland) started a few years ago with Project BRaVo. Project BRaVo is a project for building a new reporting tool for insurance doctors and labor experts. Three old reporting tools have been replaced by BRaVo. The BRaVo development team wants to improve the quality and maintainability of the software.

In his role as software engineer, Niels was responsible for improving the quality and maintainability of the reporting application. Niels has done research on test automation, implemented architectural improvements and implemented a CI/CD environment.

Thanks to Niels, the software quality and maintainability of the BRaVo project has improved. He implemented a better architecture, educated the team in the use of Unit Tests (XUnit) and implemented a new CI/CD environment with SonarQube and Selenium UI tests that Niels has configured in Azure DevOps.

*Technologies: C#, .NET MVC 5 / .NET Core MVC, Entity Framework, XUnit, Specflow, Selenium, Jenkins / Azure DevOps (CI/CD), Powershell, SonarQube, SCRUM, SVN, Git*

**April 2018 – August 2018**

**Conclusion Flora – Software engineer**

The company Conclusion has taken over the management the infrastructure and application landscape from Royal FloraHolland. Royal FloraHolland is one of the largest flower auction companies in the world. Conclusion wants the existing applications (more than 350) to be modernized and migrated to the Cloud. Conclusion also wants to train the old IT department of Royal FloraHolland with the new technologies and techniques.

In his role as software engineer, Niels was responsible for modernizing the applications and migrating them to Amazon Web Services. Niels communicated with the team which applications had to be migrated, he updated the used libraries and frameworks to the latest versions and adjusted the code where necessary. Niels then configured the CI / CD environment within VSTS and ensured that the application was properly installed on AWS. Niels also gave presentations and workshops about VSTS, Git and AWS to the old IT department of Royal FloraHolland.

Thanks in part to Niels, a large part of the applications have now been modernized and migrated to AWS.

*Technologies: C#, .NET MVC5 / .NET Core 2 (MVC), AWS, Azure, VSTS (CI/CD), ASP.NET Web Forms, WinForms, WCF, Entity Framework, Scrum, Git.*

**July 2016 – March 2018**

**Dutch education executive agency (Capgemini) – Software engineer**

The Dutch education executive agency wants to rebuild some applications built with Oracle Designer using C# .NET. This is needed because Oracle Designer is not supported anymore by Oracle. These applications are responsible for maintaining educations, school and student information, which are used to calculate the funding of the educational institutions. The Dutch education executive agency also wants to conduct research into the DevOps way of working.

In his role as a software engineer, Niels was responsible for rebuilding three Oracle Designer applications and for researching the DevOps working method within the company.

For one of these applications Niels was also the lead developer of the Scrum / DevOps team.

Niels coordinated his work with the team and implemented the desired functionality. Niels and his team implemented both the front-end (Angular 4 / bootstrap) and the backend (.NET REST API) of the applications. Niels also worked closely with a continuous delivery team to implement DevOps (Selenium / TDD / CD).

Thanks to Niels and his team, three applications have been rebuilt and are fully supported. The company is also on its way to becoming a more Agile organization by using the DevOps way of working.

*Technologies: C#, .NET MVC5 / .NET Core MVC, Angular 4, Entity Framework, Oracle, HTML5, jQuery, Typescript, Scrum/DevOps, TFS.*

**February 2016 – July 2016**

**Dutch education executive agency (Capgemini) – Software engineer**

The Dutch education executive agency wants the application landscape, which provides for the funding of educational institutions, to be properly maintained. They also want to have an overview of the current status of the systems involved.

In his role as software engineer, Niels was responsible for the maintenance of the application landscape and for researching, designing and implementing a dashboard application that shows the status of the various applications and services. Niels coordinated the maintenance work with the management team and repaired the errors found in the application landscape that consisted of several Web / Windows services and .NET applications.

Niels researched the desired functionality of the dashboard application and coordinated this with the lead developer. Niels then implemented both the front-end (AngularJS) and back-end (.NET MVC 5 and a .NET Windows service).

Thanks in part to Niels, many different software errors were solved in the application landscape. Also, thanks to the new dashboard there is now a clear overview of the status of the systems involved.

*Technologies: C#, .NET MVC5, AngularJS, ASP.NET, WCF, Entity Framework, Oracle, jQuery, HTML5, CSS, SASS*

**February 2014 – January 2016**

**Rituals, Roompot and WE Fashion (Emakina) – Software engineer**

Rituals, Roompot and WE Fashion wanted to generate more revenue and therefore attract more customers to their e-commerce websites. Emakina was responsible for renewing and / or rebuilding the e-commerce websites of these customers.

In his role as a software engineer, Niels was responsible for implementing the desired functionality. Niels was the lead developer of the WE Fashion project. There he was responsible for the result to the customer and for the SCRUM team. He coordinated his duties with his team, project manager and client. He implemented the new e-commerce websites. He implemented both the front-end (HTML5, CSS3 (SASS), JS) and the backend (.NET MVC 4, EpiServer 7, Demandware) of the sites.

Thanks in part to Niels, the e-commerce sites have been renewed, are a lot more user friendly and clearer. The turnover of the three companies has since risen sharply.

*Technologies: C#, .NET MVC, Demandware, Entity Framework, Epi Server 7, MySQL, SQL, jQuery, HTML5, CSS, SASS, Scrum*

**June 2013 – January 2014**

**Scorito.com (Via Emakina) – Software engineer**

Scorito.com is a sport pool site. The company wanted to make the Roland Garros and Tour de France games easier and more interesting in order to get more members. Emakina was responsible for the management of this website.

In his role as a software engineer, Niels was responsible for implementing the desired adjustments. He coordinated the work with the development team and the project manager. He then programmed the existing website made in .NET MVC 3 with his team.

Thanks in part to Niels, the sport pool games are now easier and, above all, more manageable, increasing the number of visitors to the website.

*Technologies: C#, .NET MVC3, Entity Framework, SQL Server, jQuery, HTML5, CSS, SASS, Scrum*

**February 2013 -June 2013**

**Relephant – Software engineer**

Relephant wanted to renew their website and job site to attract more customers and find new employees. They also wanted to improve the management of this website.

In his role as a software engineer, Niels was responsible for part of the realization of this. He coordinated the work with the development team and the project manager. He then, together with his team, programmed a CMS system made in .NET MVC 3 and Episerver 7.

Thanks in part to Niels, Relephant was able to manage the site more easily and attract more visitor. However shortly after the site was build, the company was taken over by Emakina.

*Technologies: C#, .NET MVC3, Entity Framework, SQL Server, jQuery, HTML5, CSS, SASS, Episerver 7, Scrum*



**September 2012 – December 2012    De Vries WFM (InfoSupport) – Software engineer**

For their workforce management application for retail, De Vries WFM wants to involve the employees of supermarkets more in the planning and wants to inform these employees of the tasks that they must perform.

In his role as a software engineer, Niels was responsible for researching, designing and implementing an automatic task-level planning system and a software solution for supermarket staff.

He expanded the workforce management applications (Silverlight / WCF) application with a system that automatically divides the tasks of the staff. He then implemented a mobile app (Windows Phone 7 and Mono for Android) that connected to this system and with this app the supermarket staff could view their tasks and state the status of these tasks.

He presented the result to the management of De Vries WFM and gave advice for possible follow-up steps for the project. In the end it turned out to be very difficult to fully automatically schedule supermarket staff at task level. It was therefore advisable to expand the application with an app for employers who then partially forward the tasks to the employees.

*Technologies: Silverlight, WCF, Scrum, RUP, Mobile, Test Driven Development, CSS, SQL Server*

