Resume Frank van Bokhoven version: November 2024

Personalia

Name Address Date of birth	: :	Ing. F.L.H. van Bokhoven (Frank) Arnhemseweg 39, 6991DK, Rheden 27-12-1971
Sex	:	
		Widower, two children: Jorn(18), Febe(16)
City		Rheden
Company	:	Yggdra B.V.
Comp.nr	:	09193694
BTW	:	153053008B01
Competences	:	ICT Consultant / Senior Software Engineer / (Azure) Devops / Database
	special	ist / Architect / Build manager
Email	:	frankvanbokhoven@yggdra.nl / frankvanbokhoven@gmail.com
Linked-In	:	https://www.linkedin.com/in/frank-van-bokhoven-0b56192/
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Education	:	AHS Den Bosch, AMBI, Prince II, Borland, Borland Certified, MSCSD, Programmer, FPA, Sybase ASE, MCP
Specialized in	:	Azure DevOps, Azure CloudMicrosoft C#.NET & VB.NET, Delphi, ASP.NET, Core, MVC, VBA, Pega, DevOps, CI/CD, Python, Crypto, Highcharts, SQL server DBA, Design, consulting and technical project lead Energy Monitoring

Recent projects

Role/function	Key words	Period
Devops Engineer	Azure Cloud, Bamboo, Maven, Sonarqube	5 2024 - present
.net / AI / ML / Python	Machine learning AI, Data engineering	12-2023 - present
Devops / fullstack .net / Azure (private) Cloud engineer	Devops, Dotnet 7.0 MAUI, CI/CD	7-2023 - 3-2024
Fullstack .net / Python /AI / Azure Cloud Engineer	Weaviate AI, DevOps, C#, Python, Docker	3-2023 - 6-2023
Fullstack .net / Azure Devops / Azure (Private) Cloud migration engineer, data engineer	C# asp.net core, Angular 9, Azure Cloud, Devops, Azure Data factory, Data Vault, Powershell, Relativity, OCiR, PowerBi, Python	1 – 2021 1-2023
Fullstack .net / DevOps consultant / Private Cloud (Justitie)	Vb.net asp.net Exact Synergy, MSSQL, Azure Devops	1-2022 12-2022
Software Engineer fullstack	C# ASP.NET MVC REST API, Azure SQL server, Azure Devops, Data Vault, RabbitMQ, Kafka	4 – 2020 1-2021
Vb.net / devops consultant fullstack	Vb.net asp.net Azure Devops	1-2022
Software Engineer / Architect	C#.net Core, React.JS Bitcoin blockchain, Azure Devops, Azure Sql database	3-2020 5-2021
(sen) Software Engineer	C#, Api, Asp.net mvc, React.JS, Azure Devops	3-2019
.net / Devops Consultant	Build / devops (C#, C++,QT/git/TFS/Azure Devops CI/CD, MSSQL, Docker, TDD	3-2018 3-2020
Software engineer	C# Azure devops .net core mvc, Azure SQL database	2019
(Senior) Software Engineer / Architect	C#, Winforms, SIP, ASIO, Freeswitch, WCF, .net Core	01-2017 02-2018
Software engneer/Architect	C#.net core, Windows IOT,	2017 - 2018
(lead) Software Engineer	C#, ASP.net MVC5, classic asp	06-2016 12 2016
(Lead) Software Engineer	C#, ASP.net MVC5, MSSQL	03-2016 5-2016
(Senior) Software Engineer	C#, ASP.net MVC5	12-2015 02-2016
(Senior) Software Engineer	C#, MSSQL, Sencha Touch 2, Javascript, MVC, MSSQL, Oracle, Entity Framework, Kafka	07-2015 01-2016
Solutions Designer	Solution design, Select, Bank	03-2015 06-2015
Consultant	C#, GoPro, Sony XDCAM, VB.net	01-2015 03-2015
Software Engineer	VBA, Excel	12-2014 01-2015
	C#, Microsoft Healthvault, SoapUI, Windows Azure, Scrum,	08-2014 05-2015
C#, Architect	nunit,Azure SQL Database	And 2020-4
ICT Consultant/Architect	SSR ASP.NET MVC5 / VB.NET / MSSQL /Exact Synergy Enterprise & Exact Globe / JQuery / Javascript	04-2014 04-2018
Consultant / Software engineer	SGL Concepts / ASP.NET MVC 4 / C# / Windows Azure, Azure SQLDatabase	08-2013 02-2014
Software Engineer	Ambrac, C#, Webservices, API, OAUTH, TDD	04-2013 05-2013
ICT Consultant/Architect	C#.net Exact Synergy Enterprise, MS SQL Server, Orbis	06-2012 03-2014
ICT Consultant	C#.net, Microsoft Dynamics, Javascript, TFS, Oracle	03-2012 06-2012
Senior Software Engineer	Vb.net (Winforms), mySQL, SubVersion, Inno setup, ezTCP	11-2011 03-2012
Senior Software Engineer	VB.net (WinForms, SOAP, WCF), C#.net, MySQL, Media	3-4-2011 10-2011
Consultancy / Senior Software Engineer	C#.net, C++, (Winforms / ASP.net / SOAP), ESSaver, Energy saving, SQL Server, web services (SOA), Subversion	8-2009 2-2010
Consultant ICT / project lead	Enexis / Synfra, functional design, technical project lead, Webservices SOA, Flash, CSS	1-2009 12-2010
Consultant ICT / technical	Essent LTVA / Synfra / SQL Server database design	C 2007 12 2000
projectlead	Oracle SOAP interface for Tibco import huisaansluitingen.nl	6-2007 12-2008
Architecture / Design / Software Engineer	C#.NET,(ASP.NET), Flash SQL-Server 2005 design and development, process analysis, Design. SOX compliancy,	05-2006 05-2007
Software engineer	Defense C2SC, Delphi and C#.NET	01-2006 03-2006
Architecture / software engineer	NIDO and Essent-Betalingsverwerking Access/VBA	10-2005 12-2005

Coaching	C#, winforms, Kadaster, UML, Architecture	10-2005
Software engineer	KPN-Telecom, C#.net, (ASP.NET), SQL Server	06-2006 09-2005
Architecture / Design / Software engineer	Snap-on Diagnostics, Delphi, C#.net, C++, (WinForms) process analysis, Design, SQL Server DBA.	06-2003 05-2005
Designer / Software engineer	Cordis, C#.net, process analysis Design, FDA part 11, PVCS source integrity	01-2003 06-2003
Designer/ Software engineer	OTB engineering, Delphi, process analysis, Design	07-2002 01-2003
Designer/ Software engineer	TNT, Delphi, UML, PVCS source integrity	02-2002 06-2002
Software engineer	Kalkzandsteen, Delphi, Sybase, MKS source integrity.	10-2000 02-2002
Software engineer	MPS, Delphi SQL-Server, Web development, MKS source integrity	01-1999 09-2000
Software engineer	AIP, EPS, Delphi div. report tool development, Interbase, SQL- Server	06-1998 01-1999

Other activities

My children Board shooting range Willem Tell Brummen Board KNSA (Koninklijke Nederlandse Schutters Associatie) District 2 Board Football club vv Rheden commerce Chairman Board NVBIW Eduard de Beaumont (Dutch Weapon Collectors Association, www.wm8.nl) Shooting (military and ordnance rifle) Mountain biking Skiing	2007 2007 2013 2016	2015 2011 present present
Skiing Diving Member Cloud Native Computer Foundation	2022	present

IT courses / Certificates		
School	Name course	Year
Microsoft	Microsoft Azure developer (AZ 204)	2024
Microsoft	Microsoft AI Fundamentals (AI 900)	2024
Microsoft	Microsoft AI Engineer (AI 102)	2021
Weaviate.io	Weaviate course	2023
Cloud Native Computing	Certified Kubernetes Administrator (CKA)	2023
Foundation		2020
Microsoft	AZ-305 Designing Microsoft Azure Infrastructure solutions	2022
merecent	(Azure Solutions Architect Expert)	2022
Python Institute	PCEP-30 Cert. Python Professional Cert.	-
Python Institute	PCAP-31 Cert. Python prog. Cert.	2021
Python Institute	PCEP-30 Cert. Entry level Python prog.	2021
Microsoft	DA-100 Analyze data with ms Power Bl	2021
Microsoft	AZ-900 Azure fundamentals	2021
Microsoft	AZ-400 Designing and implementing DevOps	2021
Microsoft	AZ-204 Microsoft Azure DevOps Solutions	2021
Microsoft / edX	DevOps200 5x DevOps Testing	2020
Microsoft / edX	DevOps200 1x DevOps Practices and Principles	2020
Microsoft / edX	Devops 200.9x Architecting Distributed Cloud Applications	2020
Udemy	The Complete Kubernetes Course	2020
Microsoft / EDX	Devops 200.9x Architecting Distributed Cloud Applications	2020
Uni Virginia	Continuous Delivery & DevOps	2019
TOGAF 9 Foundation	Open Group	2019
Microsoft MVA	Intermediate ASP.NET Core	2017
Microsoft MVA	ASP.net Core	2017
Person Vue	Pega SCSA	2017
Person Vue	Pega CSA	2017
Person Vue	Pega CRSS	2017
Cibit	Certified Business Intelligence Professional	2016
QuantLib	Quantlib course	2015
IMF	Certified Business Intellegence Professional	2015
Microsoft	Windows8 Bootcamp (seminar)	2012
WSED	Seminar Duurzame energie	2010
SDN	SDN seminars	2009
Krauthammer	Adviesvaardigheden	2009
Microsoft	LEAP	2009
Microsoft	MCAD 70-551 Upgrade MCPD	2008
Prince II	Foundation	2008
Microsoft	MCAD 70-315 .NET Forms	2006
Microsoft	MCAD 70-316 .NET ASP.NET	2006
Microsoft	MCAD 70-320 .NET XML Webservices	2006
Microsoft	MCSD 70-229 SQL Server 2000	2006
Microsoft	MCSD 70-300 Analyzing Req. Achitects	2006
Ordina/Twice	Master class Architect/Consultant	2005
AMBI	HG1, HG2, HG3	2000
AMBI	HSB1, HSB2, HSB3, HUI	2002 -
		2004
AMBI	HSB-A	2005
PRINCE II		2003
Borland	Delphi Certified Developer	2003
Sybase	Sybase ASE	2001
Oosterkamp	Delphi fundamentals	1998
Oosterkamp	Delphi advanced/ component	1999
Twice IT	Delphi 8	2004
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Publications

Patent: N2003915 Improved power usage management (filed: NL: 7/12/2009, Europe, USA: 6/12/2010) Presentations: Essent GreenIT conference, titel: 'groene automatisering voor de kantoorwerkplek' 7 oktober 2010 Essent GreenIT Conference 7 oktober 2010 "Energiebesparing op de werkplek", Baarn, Nederland

November 10 2011: Nordic Venture Forum: Datacenter energy monitoring, Copenhagen.

May 8 2012: KNGS Green Software Amsterdam, 'Measuring software energy consumption' at (Knowledge Network Green Software)

February 16 2013: ICT4S conference on green software, Zurich, 'Pilot results software energy monitoring'

Languages

Nederlands (Dutch)	
English	
German	
French	

Writing	Verbal
Excellent	Fluent
Excellent	Fluent
Mediocre	Fluent
Basic	Basic

Project details

The pages below describe in detail all my assignments since 1998.

Period	Employer	Description
1998 – 2000	Agri Information Partners, Wageningen	Several programming projects for agribusiness companies
2001 – 2007	Ordina, Nieuwegein	Several programming and consultancy projects for companies in very different branches
2007 – present	Yggdra (own company)	Consultancy projects and development jobs.

	2024-05 - present
Organisation	APG
Project name	Koala
Branch	Finance / Pensions
Role	Devops consultant
Details	APG is the biggest processor of pensions in the Netherlands and manages more than 650 billion Euro. APG has partly a Microsoft ADO stack and partly Atlassian stack. This job was to work on some major problems with (Atlassian Cl/CD builds on Bamboo and their integration with Sonarqube. Furthermore there was the need for NodeJS direct compilation on Linux / Maven / Bamboo, which introduced several problems. The result was for both problems that i succeeded in fixing both of them and there is now a running Sonarqube analysis for Mule projects and a (navive compilation for the NodeJS.
Program languages	Ansible, Docker, Kubernetes, Maven, Bamboo, Jira. Net, Azure, MobaExterm, Mule

Databases	
Hardware/Cloud	Private cloud APG, maar ook Azure en Azure Devops
Tools	Microsoft Azure DevOps On premise, Git, Docker, Kubernetes K3S, Ansible, Atlassian Jira, Bamboo, ServiceNow

	2023-12 –
Organisation	AI-HRM
Project name	AI-HRM
Branch	Human recource management
Role	Devops consultant, Founder
Details	AI-HRM uses machine learning to benchmark an applicants profile to profiles of selected employees in order to get an AI impression of the applicatiants usability.
Program languages	.net Azure ML, Azure Devops (on premise), .net 8.0, Python, Anaconda, Pandas
Databases	
Hardware	-
Tools	Microsoft Azure DevOps, Data factory, ETL, Data Engineering, Azure ML, Git, .net 8.0

	2023-07 – 2024-03
Organisation	Rheinmetall
Project name	C4i
Branch	Defense
Role	Devops consultant
Details	Various Devops work, ranging from development of YAML pipelines that generate via powershell NSIS setups, based on json input, setup of pipelines that generate Proxmox and Kubernetes (K3S) clusters that act as build servers for compilation of .net MAUI software on Windows, Android and Linux.
Program languages	Azure Devops (on premise), Ansible, Docker, Kubernetes, NSIS
Databases	
Hardware/Cloud	Private cloud Rheinmetall
Tools	Microsoft Azure DevOps On premise, Git, Docker, Kubernetes K3S, Ansible, NSIS

	2023-03 –
Organisation	Chicago Al
Project name	Al Analysis
Branch	Trading
Role	Lead .net consultant / Cloud engineer
Details	Set up and analysis of the requirements, on the one hand a .net solution that synchronizes prices of various assets to a MariaDB and offers them as Weaviate vectors, from the .net application. For this, various Python and Docker scripts must be built, which are started from the .net solution. The configuration of Docker is also important here. The Weaviate vectors will be used in predicting the direction of the asset's value.
Program languages	Python, Weaviate, C#.net, Bootstrap, Azure DevOps, Docker Restfull .API, Powershell
Databases	Maria DB
Hardware	MS Azure (private) cloud
Tools	Microsoft Azure DevOps, Azure ML, Data Engineering, Git, Docker, Weaviate, ChatGPT

	2021-10 – 2022-03
Organisatie	Vecozo
Project naam	Vecozo
Branch	Medical billing
Rol	Fullstack .net / Azure Devops / Cloud consultant
Details	Monitoring, expanding, reviewing Azure Devops setup, solving various problems in service fabric update pipelines and debug mail application, which is a combination of an 'old-fashioned' .net application, azure function that puts and reads emails in an Azure Service Bus. This concerns 100,000+ emails per day. This application gave several deadlocks and other problems. These have been analyzed and resolved. The messages are processed by a combination of Azure Bus, Kafka and RabbitMQ. The processing apps are converted to OutSystems, these services run on Windows systems hosted in Service Fabric
Program	C#.net, Azure DevOps, Azure cloud, Azure Service Bus,
languages	Service fabric, Azure Functions, Powershell
Databases	MSSQL
Hardware/Cloud	MS Azure (private) cloud
Tools	Microsoft Azure DevOps, Data Vault, VS2022, Git, Azure Boards, Kafka, ServiceFabric, RabbitMQ

	2022-01 – heden
Organisation	ABN-AMRO
Project name	NFR-BCM Operational Continuity in Resulution
Branch	Non Financial Risk
Rol	Lead .net / Azure Devops / Cloud consultant
Details	Design and implementation of the requirements, set by the banking regulator for the OciR project (operational continuity in Resolution). The work is partly the translation of these requirements to an implementation in Azure and Azure Deveops, using pipelines, creating the required cloud infrastructure (azure mssql db, webapp, azure analytics, some Azure functions, application insights, keyvaults, data factory, data bricks. Everything compliant with the banking standards. Another important part is the development of a Data Maintenance tool, developed in asp.net core / angular 11. (based on the Relativity manager i developed also in 2021 in 2021)
Program languages	C#.net, .net core,API, Angular 9, Azure DevOps, Azure cloud, Azure Data factory, Data Engineering Web.API, C# Azure Functions, Powershell,
Databases	MSSQL DB in Azure cloud
Hardware/Cloud	MS Azure (private) cloud
Tools	Microsoft Azure DevOps and GitLab (ref to other abnamro projects), Data Factory, Data Vault, Data Bricks VS2019, Git, Azure Boards

	2022-01 – present
Organisation	SSR (Studie Centrum voor de Rechtspraak)
Project name	SSR Exact synergy
Branch	Justice department
Role	Lead .net / Azure Devops vb.net consultant
Details	I worked at SSR before. Due to the departure and death of key people, I was asked back to solve overdue work, but also to bring all code from scratch, all projects to Azure Devops. It was interesting to fill a completely empty Azure devops with 5 repos, filled with vb.net code, set up scrum

	boards, build and release pipelines, analysis: everything. A very complicating factor is the Justice environment, where complex AD configuration has to be met, firewalls must be broken through and all this to integrate the vb.net custom code.
Program languages	vb.net, Azure DevOps, Justitie cloud
Databases	MSSQL
Hardware	Private cloud Serverfarm Justitie
Tools	Microsoft Azure DevOps, VS2022, Git

	2021-01 2021-12
Organisation	ABN-Amro (forensics)
Project name	Forensics Data team / eDiscovery
Branch	Banking
Role	(senior) software engineer / Architect
Details	ABN-Amro is conducting its own eDiscovery in their forensics department, using Relativity. This is implemented in the Microsoft Azure cloud. A number of pipelines have been set up to quickly roll out all the nessecary infrastructure (servers, storage, processing) to ediscover cases of colossal sizes (> 10 TB) using a number of vm's and webapp containers. And every Azure change is also done via pipelines. The project is to further expand these pipelines and develop tooling for monitoring and audit trails. And also develop a dashboard management tool in .net core with Angular 9, EF and API,
Program languages	C#.net, XML, Angular 9, Web.API, Azure DevOps, Web.API
Databases	Azure SQL database, MS Azure,
Hardware	-
Tools	Microsoft Azure DevOps, Microsoft Azure Cloud, Datafactory, Postman, Git, TDD

	2020-04 – 2020-12
Organisation	Baloise
Project name	DX
Branch	Insurance
Role	(senior) software engineer
Details	Baloise's software needs to be adapted due to many acquisitions by Baloise. The My Baloise Broker is an asp.net MVC application, where a series of improvements have been mentioned by the 'DX' team. These are cosmetic and procedural improvements and changes. The application is hosted in the Azure cloud. As a Web app and partly as Azure Functions. Azure Devops is used, authentication through Openid
Program languages	C#.net, XML, Web.API, Azure DevOps, Web.API, Oauth, AKS, Azure Functions. Kafka
Databases	Azure SQL Database
Hardware	-
Tools	Microsoft Azure DevOps, VS2019, SoapUI, Git, Kafka/ Azure service, Slack

	2020-05
Organisation	Zodos
Project name	EPD plus
Branch	Medical
Role	(senior) software engineer / Architect
Details	Connection, via web.api between Madlogic and EPD plus. The web.api is

	described by Madlogic and must be incorporated in c#.net and a number of new screens, showing the data must be developed. Before this could happen, a single sign-on, using Oauth, had to be developed. Also did some architecture advice about the scaling of Zodos by using webapps and VM containers
Program languages	C#.net, XML, Web.API, Azure DevOps, Web.API
Databases	Azure SQL database, MS Azure,
Hardware	-
Tools	Microsoft Azure DevOps, VS2019, Postman, Git, Slack

	2019-04
Organisation	Cryptowriter
Project	Cryptowriter
Branch	Crypto
Rol	(senior) software engineer / Architect
Details	This web application lets uses like underwriters, notaries, or any kind of person, write data (for instance text) to blockchains like the Bitcoin blockchain, Ethereum, Bitcoin Cash and Gulden. The project consists of a web portal developed in core mvc .net and some webservices that call services (also developed in .net core) on a server that runs nodes for the beforementioned blockchains.
Program languages	C#.net Core, React.JS, Azure DevOps, Web.API
Databases	SQL server, Blockchain nodes for Bitcoin, Ethereum, Bitcoin Cash, Bitcoin SV and Gulden
Hardware	-
Tools	Microsoft DevOps, VS2019, Postman

	2019-03
Organisation	Koppert
Project name	Scout portal
Branch	Horticulture
Role	(sen) software engineer
Details	Koppert is the (almost sole) market leader in biological pest control. My brother Hans developed a portal in which the garderners can enter their biological scout data about the pests. This portal still needs a lot of extra development. My role is to do some of this extra development, bugfixing and add several new API endpoints.
Program languages	C#.net, XML, .net Core, microsoft DevOps, Web.API
Databases	Azure Ms SQL server, Azure,
Hardware	-
Tools	Azure DevOps, VS2019, Postman, Jira

	2018-03 ~ 2020-03
Organisation	Defensie (Dutch Army)
Project name	SATS / Landgebonden IT
Branch	Defense
Role	Build manager (c#/git/devops consultant)
Details	The Dutch army has a large development centre, where command & congtrol applications that run in combat vehicles like tanks, airplanes,

	fennek's etcetera are developed. Over 100 specialists develop and test this software. My job is Devops work: technically oversee the automatic builds. But also assist in setting up builds and deployment pipelines for various projects in C++ and QT, Troubleshoot and configure CI/CD of these builds. Also develop some reporting tools/dashboarding in ASP.NET MVC using libraries like Highcharts, Jquery, about build statusses and Sonarqube code quality and so on.
Program languages	C#.net, C++, QT, XML, .net Core, TFS, Azure Devops Server and GitLab ,GIT, TDD
Databases	MSSQL 2016, MySQL
Hardware	-
Tools	TFS, Azure Devops Server, Sonarqube, Cruisecontrol, WCF, SonarLint, MCA, NX, Vsphere, Sourcetree

	2017-10 ~ 2018-02
Organisation	Marine (Dutch Navy)
Project name	SIM
Branch	Defense
Role	(senior) Software Engineer / Architect
Details	The UNET trainer, which i developed earlier in 2017, needs to have a game engine, giving the UNET the tactical scenarios. There was already an ancient product that did this, but was not functional anymore. I have analyzed this and made a modern .net Core WCF service that replaces this. Before start, i have determined the architecture and technical schematics for this product. For this a combination between a client and server, as well as a simulation provider, using WCF had to be developed, as well as a connection to the pjsip, that runs on a Linus Debian VM.
Program languages	C#.net, XML, WCF .net Core
Databases	-
Hardware	-
Tools	Git/ Azure Devops, Freeswitch, SIP, Linux Debian

	2017 - 2021
Organisation	ActiveNoise
Project name	ActiveNoise
Branch	Electronics
Role	Software Engineer / Architect
Details	Development and marketing of a noise cancelling device. All the engineering, testing, programming is done by me. The result is a functioning device, able to cancel out noises in a room, road, office, etcetera. The programming part consists of the development in .net core for windows IOT and the deployment of this on a Raspberry Pi that is running Windows IOT(universal) Development of a tactical trainer for the training of submarine and (battle)ship navy crews. I developed this product all by myself, based on the requirements brought together by the OP-school and the previous version. The frontend are all C#.net wimforms and the communication is via SIP/Freeswitch. Before start, i have determined the architecture and technical schematics for this product.
Program languages	C# VS2019, .net Core, XML Freeswitch
Databases	-
Hardware	IOT, Raspberry Pi
Tools	Git, SourceTree, Azure Devops

	2016-06 ~ 2016-12
Organisation	RPMcar
Project name	RPMcar
Branch	Automotive
Role	(lead) Software Engineer
Details	RPMcar offers a crm-like system for car dealers. Using this, the dealer can keep track of sales, production status of cars, logistics: everything. My task were to keep this system alive and implement a large number of changes to SOAP connectors, and even make some small changes in the existing frontend applications, that are developed in partly asp.net mvc5 and classic asp
Program languages	C# VS2015, WCF, XML, asp.net, classic asp
Databases	MSSQL 2014
Hardware	Nvt
Tools	Git, SourceTree, Jira, Teamviewer

	2016-03 ~ 2016-05
Organisation	Lukkien
Project name	Stedentrips.nl 4.0
Branch	Leisure
Role	(Lead) Software Engineer
Details	Development in ASP.NET MVC of the the new version of Stedentrips.nl. This project was already in its final stages. Because the previous lead engineer left, i was asked to take care of the final stages, together with 4 collegues. The project was done in a Scrum team. The project needed a lot of refacturing to fix some architectural malfunctions.
Program languages	C# VS2015, REST, SOAP, JQuery
Database	MSSQL 2012, nHibernate, ETF,
Hardware	Nvt
Tools	GIT, SourceTree, IISexpress, Oauth2, Web.API, Scrum, Jira

Period	2015-12 ~ 2016-02
Organisation	Tennet
Project name	Inspectie
Branch	Utilities
Role	(senior) Software Engineer
Details	Development in ASP.NET MVC5 of the central application that is used for asset inspection assignment and review. This project has an web.api server layer that communicates with several existing systems within Tennet. During this project, all screens/process steps neccesary for the inspection process are developed. The requirements for these are determined in co- operation with the functional specialists and Tennet sequrity and corporate architects.
Program languages	C# VS2015, REST, SOAP, JQuery
Databases	MSSQL 2012 en 2008
Hardware	Nvt
Tools	TFS, SoapUI, IISexpress, Oauth2, Web.API, nHibernate

	2015-07 ~ 2016-02
Organisation	Asito
Project name	Migration 12-20
Branch	Services

Role	Senior software engineer
Details	Asito is moving all its applications to handhelds such as iPhone and (touch)book. One of these is the OCO, the Offer calculation app. This is an iPhone app that has a C#.NET backend and Sencha Touch as front end. My job is to solve a long list of bugs and 25 RFC's. These bugs and changes are throughout the application, some are in the C# code, some are in Sencha touch. Dispatching of work is an event driven system, running on RabbitMQ and Kafka.
	My job is not only to fix these, but also work with the customers to get them to feel they finally have an application that really supports their work.
Program languages	C# / Javascript / Sencha touch
Databases	MSSQL 2014, Oracle 11c
Hardware	iPhone / Ultrabook
Tools	TFS, Redmine, Oauth2, nHibernate, Kafka IIS7, TDD

	2015-03 ~ 2015-06
Organisation	ABN-AMRO
Project name	Migration PeopleSoft As-Is
Branch	Bank
Role	Solution designer
Details	Write a High Level Technical Design van TIBCO REST services for diverse ABN-AMRO Channel processes like request of Credit en Debit cards, Investments.
	My job was to convert the data of the functional design to the technical design, and find out what backend processes could be used. Using this info i made a design in Select Architect.
Program languages	REST
Databases	n/a
Hardware	
Tools	Select, Cascade, TIBCO

	2015-02 ~ 2015-8
Organisation	People4All
Project name	Smarterfind
Branch	Office
Role	Software Engineer
Details	Development of Outlook plugin for mail search. This is a plugin for Microsoft Outlook. It has a number of configuration and report screens that are implemented as a separate WinForms application.
Program languages	C# ,Winforms, Javascript, InnoSetup,
Databases	SQLite
Hardware	
Tools	Visual Studio 2013 and TFS, dotCover (jetbrains)

	2014-12 ~ 2015-01
Organisation	PDS/Shell
Project name	SOT tool
Branch	Oil/Gas
Role	Software Engineer
Details	Development and bug fixing for the Shell SOT tool. This tool is for risk assessment and is programmed in Excel VBA.
Program languages	VBA (office 2013)

Databases	None	
Hardware		
Tools	Excel VBA	

	2014-08 ~ 2015-04
Organisation	Zodos (Zorg Dossier)
Project name	Consultancy - Web development
Branc	Healthcare
Role	Software Engineer
	Zodos is a product where a patient him/herself can inject his/her data about medical data in its own online patient dossier. I implement the Microsoft Healh Vault and store and fetch all medical data in the appropriate thingtypes. The web application itself is stored in Windows Azure and developed in C#, and makes heavy use of JQuery, Javascript. There is also an SOAP connection to Zorgmail. The first one of its kind in the Netherlands. For the first time a patient hem/herself can send messages via Zorgmail to his/her medical providers. I analyzed and developed the SOAP service and XML messages necessary for this.
	Visual Studio 2013 and Subversion, ASP.NET, ASP.NET MVC 5, Microsoft HealthVault. JQuery, JqueryUI and Javascript, Azure Cloud
Databases	MySql and Microsoft Healthvault,
Hardware	
Tools	SoapUI, Microsoft unit test.

	2014-04 ~ 2016-present
Organization	Studiecentrum Rechtspraak Zutphen (SSR)
Project name	Consultancy / development
Branch	Government / Judiciary
Role	Software Engineer / consultant
Details	The past two years, i have been involved in converting some of the custom functions in Synergy Enterprise, as described below. As SSR is very content with the results of this, they have asked me to develop a number of financial reports. These are very complex reports, with data sources from multiple SQL Server databases an complex data model. We have chosen ASP.NET MVC5 as the tool for this, because in this case it is important to get the data into a model and from there get it to a GUI
Database	MS SQL Server 2008
Tools	Visual Studio 2013 and Subversion (tortoise and ankhsvn), vb.net, ASP.NET, ASP.NET MVC5, Orbis, Exact Synergy Enterprise and Exact Globe, JQuery, Javascript

2013-08 ~ 2014-2	
Organization	SGL Concepts
Project name	Consultancy / development
Branch	Sports and horticulture
Role	Software Engineer / consultant
Details	SGL improves the grass quality in football stadiums around the world with their technology. They are the market leader in this technology (placing grow lamps above the grass, supported by information technology. The current site however is built in Microsoft Silverlight and has a lot of problems. Because they also have a number of technical improvements, it has been decided to develop a new version in the newest technology, thus, in the (Azure) cloud and in ASP.NET MVC 4, Razor and iTextSharp. The communications of the sensor cubes is

	developed using ASP.NET MVC4 WEB API.
Database	MS SQL Server 2008 en MySQL
Tools	Visual Studio 2012 en ASP.NET MVC 4, ETF, nHibernate

2012-06 ~ 2013-2	
Organization	HvA
Project name	Consultancy / development SGL and Koppert
Branch	Horticulture ICT
Role	Software Engineer / consultant
Details	These embody two projects: 1) the development of a Signaling cloud service. This service is built into ms Azure and based on Log4Net. It provides a cloud worker that can be called asynchronously to provide guaranteed delivery of logging events, such as errors or warnings. This cloud worker is also connected with an SMS service, set up in a Twillio account.
	The second project is the re-development of the reporting application of SGL. This has been developed by a third party in c#.net, sql server, using Silverlight and WCF. However, this causes a number of runtime problems and SGL has decided to move away from Silverlight and WCF.
Database	MS SQL Server 2008, Azure
Tools	Visual Studio 2010 TFS (Team Foundation Server) and), ASP.NET
Period	2012-06 ~ 2014-03

Older projects

Project name : Consultancy / development

Branch : Government

Role : Software Engineer / consultant

Details : SSR organizes the education for the Dutch legal system. This educational process is supported by an Exact Synergy CRM/ERP system. This system is fitted with more than 100 custom functions developed in the classic ASP version or older ASP.NET technology. All these functions must be ported to the new ASP.NET version, using the Exact.Data data layer.

A lot of functions in the current Exact system are maintained with a number of ORBIS jobs. These jobs must all be altered to use the new Exact Synergy Enterprise web service technology.

Database : MS SQL Server 2008

Tools : Visual Studio 2010 TFS (Team Foundation Server) and Subversion (tortoise and ankhsvn), ASP.NET, Orbis

Period	: 2012-09 ~ 2015-12	
Organization	: ESS	
Project name	: development	
Branch	: Green-it	
Function : Software Engineer		
Details	: ESSaver PUE has a number of report functions. These are all built into the Winforms BI tool of	
ESSaver PUE. The same functions (Usage of software processes, usage distribution, data completeness, are built		
into an app running on Android. the app is comprised of 5 reporting screens, showing usage figures		
Database	:-	

Tools : Eclipse, C# plugin, Android plugin, SubVersion

Period : 2012-03 ~ 2012-06 Organization : @Work, Best

: Consultancy / development Project name

Branch : Microsoft Dynamics

Role : Software Engineer / consultant

Details : This customer specializes in Microsoft Dynamics CRM solutions and implementations for large customers. A number of plug-ins and conversion tools must be developed. The following tools and plug-ins were developed during this project:

*) Plug-in for auto concatenation of the name/address fields.

*) Three plug-ins that have to do with campaign automation).

8) A C#.net WPF solution for the migration of data from an older CRM system by Telefoongids (customer) to their new Microsoft Dynamics CRM system. In totals this embodies over 5 million Accounts and Contacts, together with all kinds of XML data (like markup and pictures). Database : MS SQL Server, Oracle Tools

: Visual Studio 2010 TFS WPF, Javascript, Microsoft Dynamics

Period	: 2011-11 – 2012-03	
Organization	: Moxx Mobility	
Project name	: Consultancy / development	
Branch	: Service large numbers of professional mobile devices (Motorola, etc)	
Role	: Senior Software Engineer / consultant	
Details	: Customer specializes in the service of large numbers of mobile devices (e.g. for postal workers	
or in super markets). All processes the service of these devices need, is taken away from the customer and will		

be done by this company. These processes are IT driven.

My role was to develop a database solution for the configuration files, that are used by this company, as well as several other functions, all in VB.NET Winforms. The configuration files are xml files containing a set of settings for install/update control. The database was MySQL 5.5 and VB.NET as development environment (although some parts are C#.net as well. We used Inno setup for the installer. My role was also to coach the already present developers using the knowledge and experience i have. I also did some debug work for the EMD flash tool, which is MS C++ for compact framework.

Database : MySQL

: Visual Studio 2008, .net compact framework VB.net, Subversion, Redmine, Notepad++, ezTCP Tools

Period	: 2011-3 – 2011-10
Organization	: Filmpartners software
Project name	: MXF Server / Reality Spotter
Branch	: Media
Role	: Senior software engineer
Details	: Filmpartners software develops MXF server. This product helps working with Avid and Apple

FinalCutPro. These applications work with digital media files to edit them into a ready-to-broadcast television program. These files are often extremely big. Editing them and copying them is a very lengthy process. MXF server uses hard links to speed this up.

Although the product has several customers already, there are some significant problems in it to be fixed. This was my responsibility. The application was programmed in Visual studio.net 2008 and 2010, in VB.NET (winforms)

Another application, the MXF spotter, was entirely created and designed by me. This application can read P2, XDCAM HD and XDCAM EX high-res material and create a spot log for it. These were in a client-server architecture stored in a MySQL database. The clients and servers communicate via SOAP calls. Numerous calls ware created and/or adjusted during this assignment.

MXF Server is copy protected via a Keylok dongle. For this dongle, I have made numerous additions in the checks. I also implemented Intellilock for code obfuscation of MXF server and other Filmpartners products. Using crystal reports, the spot records can be reviewed.

Operating systems	: Windows 7 64 bit
Program languages	: VB.net, C#.net web services, SOA, WCF, SOAP, KeyLok
Databases	: MySQL
Hardware	: Harmonic Omeon Mediagrid, Windows X64, IBM NLFS

Period	: 2009-8 – 2011-2
Organization	: Energy Software Solutions (my own company)
Project name	: ESSaver
Branch	: GreenIT
Function	: Project leader
Details	: In early 2009, I attended a conference at Microsoft Redmond where I got the idea for an
	· · · · · · · · · · · · · · · · · · ·

application that provides insight into the energy consumption of computer equipment. This idea is now patent pending, which was granted on 7/12/2009. On the basis of this patent i have been working with Visual Studio.Net 2008 to develop the application ESSaver. Supported by several founding customers.

ESSaver has been developed in C#.net. The central database is a SQL server 2008 database. The ERD and design for this database has been done by me. The software landscape consists of some C#.NET Winforms applications, a windows service, and a ASP.net and ASP.net MVC reporting application, and for datacenter use a Windows Service, developed in C#.NET

As a content management system for the site we use DotNetNuke4. Some of the components www.Essaver.net developed in Flash.

Besides programming work, the management and technical direction of my colleagues in Romania an important part of my work for ESSaver.

The calculation of ESSaver is contained in a patent, the preparation of which has cost a lot of time. In 2011, launched in collaboration with TNO in order to validate the application. The same is done by vanh pilots in three of our customers.

Operating systems	: XP/ Vista / Windows 7
Program languages	: C#.net en ASP.net, XML, Website DotNetNuke
Databases	: SQL server 2008 (design and dba)
Methods en techniques	: Prototyping, SCRUM
Tools	: VSS, MS Visual studio.net 2008.

Period	: 2008-12 – 2010-12		
Organization	: Enexis / Synfra		
Project name	: Synfra - Gemma		
Branch	: Utility companies / Energy		
Function	: Consultant / Designer / Project leader		
Program languages	: C#.net en ASP.net, Flash, XML (prototyping)		
Details	: The utilities (eg Essent, BrabantWater, Obragas, V		

Details : The utilities (eg Essent, BrabantWater, Obragas, WML, etc.) work together for their connections sYnfra. A collaboration, as all these parties have to dig trenches and lay connection lines for the same customer.

This process had to be redefined.

Responsibilities and activities: The connection process and all administrative actions is very complex and comprehensive. In various workshops with colleagues from different utility companies, the requirements are removed and the scope determined. This is my responsibility to make functional design.

The implementation is realized in a SOA architecture, with parts developed by an offshore company (total backup / Offshore Solutions). These developers, I have managed them (what to build transmission FO's, etc, project lead). I traveled several times in Bucharest, Romania).

Other parts (Planning and Feedback information) are outsourced to third parties, such as FasterForward and GoconnectIT.

I also talked with numerous parties within the Essent organization and Synfra LTVA submitted on behalf of numerous affiliates and institutions.

The LTVA pilot ran from December 2008. The Results are then processed in a recommendation document, based on which the functional design of Gemma (name I've made) is written. This is developed from 10/2009 by yellowtail.

Some parts of www.aansluitingen.nl (such as the Netherlands map) are made in flash. This is done by me.

Period	: 2007-06 – 2008-12
Organization	: Essent / Synfra
Project name	: pilot Lange Termijn Visie Aansluitingen
Branch	: Utility companies / Energy
Function	: Consultant / Designer / Project leader

Details : As a direct result of the pilot LTVA, the functional design of the successor of Combiplan had to be designed.

Besides this design process, parts of the pilot application were added in the already existing Combiplan. The technical implementation is in Microsoft dotNET 3.5 programmed by Romanian programmers. Responsibilities and activities: My job is as a specialist of both Combiplan LTVA processes, is to provide information to the party making the design functionally. Parts of the Design, the design of reports, non functional. requirements and design for 'Calamity and interruptions is entirely written by me.

For various companies (Ziggo, Delta / Evides, Brabant water-Enexis, various contractors), I had a leading role in connecting Web services and designing the SOA on the Synfra end. Managing this interface management has many aspects: consultation, control (Romanian) developers test sessions with all the parties involved.

Project lead of several projects:

1. Analyzing data import from <u>www.huisaansluitingen.nl</u> to the Essent back office (SAP) systems, using Tibco. My role was to analyze and work with the Tibco consultant who designed the actual import interface and tweak the design of the SOAP interface/WSDL, so the import every day would work. The result is that since 2008, every day all new connection requests are imported into the Essent/Enexis systems, and also into the Delta (Zeeland) systems (although they copy them directly into SAP)

2. deployment Synfra / Delta Plan in the province of Zeeland. I did some of the requirements analysis and made the functional specifications for the online quote. These specifications are under my supervision conducted by Romanian programmers.

2. Maintenance and care: Specification preparation and development by Romanians

3. Web Development for contractor Hurkmans

Results: The FA has been approved by the collaborating companies and is currentlyEuropean tender.

The various subprojects are successfully implemented or are still in development.

4. The latter is also time spent on setting up an Enterprise Service Bus for(through web services) to communicate between Synfra and all utilities and contractors to fill all kinds

of systems. Besides the ESB is also working with Microsoft SQL and Oracle / Tibco for the validation of (new) customers. TOAD is used as the interface to Oracle.

Period	: 2006-05 – 2007-05
Organization	: Océ HQ te Venlo
Project name	: DataDump management (D2M–Post)
Branch	: Industry
Function	: .NET Consultant/ Software engineer
Program languages	: C#.net en ASP.net, XML, SQL server 2005, MS SSIS
Details	: Océ develops and produces professional copiers and similar devices. These devices
concepto data laca containing ucase data. This data is fay DRD yaacana important fay Océ	

generate data logs containing usage data. This data is for R&D reasons important for Océ. This data, in MS Access format, binary format en XML format, must be converted to a CSV file that can be imported by SAP-BW report system. In order to develop this system, we first had to analyze what need there was for these reports. This was done in multiple sessions with business consultants. After this the technical architecture had to be determined, in cooperation with the customer. Once that was complete. The program was developed in C#.NET.

An overview of the main development activities:

- Setup development environment and .net solution, according to the architectural specifications.
- Development D2MPost windows services and all necessary business and data access classes

• Implementation database model en create scripts. Implement software landscape and Microsoft SSIS init to connect it all

• Development logging, error en data access frameworks.

• Design en development in ASP.NET of the configuration application. This web app intensively uses Infragistics Netvantage 4.3 web components

Methods en techniques: SDLC en PMM, dit zijn Sarbanes-Oxley (SOx) varianten op Prince II methodieken. Tools: VSS, MS Visual studio.net 2003, Enterprise Architect, Visio 2003

Period	: 2006-01 2006-03
Organization	: Defense C2SC
Project name	: TMR/TIP-PC
Branch	: Government
Function	: Analyst / software engineer
Program languages	: Delphi en C#.NET (Winforms)
Methods	: Documentation must be SOX compliant.
Tools	: Rational Clear quest, VSS, MS Visual studio.net, Installshield, Helpscribble
Details	: At the Dutch army, a lot of legacy software must be ported to .NET.
TMR/TIP-PC, is a program	n used by the geo department and must be maintained.

Plotter PC (an application that draws artilliry hits on a map) had to be expanded with extra functionality and redeveloped in C#.net

Period	: 2005-10 2005-12
Organisation	: Essent en Nido
Project name	: Essent Betalingsverwerking en Nido Service Rapportage
Branch	: Energy / Industry
Function	: Analyst / software engineer
Details	: Essent: Het payment-process from Essent has an quality improvement phase. To
increase effectiveness o	f these improvements a tool is developed in Access/VBA. This is a data warehouse
application, that produc	es 25-tal reports. For this job, a database structure for the access database must be
designed and implement	ted. This database is filled by a SAP/SD data export file. This database is the data layer
for the VBA reports.	

NIDO: One of the largest manufacturers of snow ploughs and snow clearance and salt dispensing companies. For servicing the trucks at the customers location, an Access / VBA application had to be developed and in part maintained. This application is able to communicate with the SAP (BW) system that NIDO has.

Role	: Analysis and software engineering
Hardware	: PC / Handheld PC
Program languages	: Access and VBA

Period	: 2005-06 ~ 2005-09
Organization	: KPN-Telecom
Project name	: XPO Synchronization en Web-application functional additions
Branch	: Telecom providers
Function	: Analyst, software engineer
Program languages	:C#.net ASP.net SQL
Databases	: MS SQL-server 2000
Tools	: MS Visual source save, XML, MS Visual studio
Packages	: Visual studio .NET
Details	: At KPN-Telecom, about 1400 applications are migrated from NT4 to the XF

Details : At KPN-Telecom, about 1400 applications are migrated from NT4 to the XP platform. The project Expedition Process Support (XPO) requires a tool that is developed in C#.net/ASP.net. This is also a sync tool. During this period I further expanded the functionality, as well as debugged it. This also meant that the SQL Server database needed a lot of changes in the database design. A lot of DBA activities needed to be conducted (deploy replication, backups and scheduled tasks)

Period	: 2004-12 ~ 2005-05
Organization	: Snap-on Diagnostics
Project name	: Snap-on Binary Create
Branch	: Automotive industry
Function	: Architect, Analyst en software engineer

Details : Design en development of a form of compiler that creates binaries files from a SQL server database of the visual authoring too (VAT). This binary file controls the Snapon scanner. (TroubleCodes, Strings, PID's, etc., etc.).

The tool is developed in C++ builder and SQL-Server. For this, I had to clarify the technical architecture of the compiler and database.

Results : Tool is used by translation department and Snapon Handheld development team in Amsterdam, San Jose en Lincolnshire, USA

Hardware	: PC	
OS	: Windows 2000	
Languages	: Borland C++ Builder and (T) SQL	
Databases	: MS SQL-server 2000	
Methods	: ERD, UML, Prototyping/SCRUM	
Tools	: MS Visual source save, XML Spy	
Packages	:MS Office	

Period : 2004-5 ~ 2004-11 Organization : Ordina / Snap-on Diagnostics Project name : Snap-on Translations Branch : Automotive industry Function : Architect, Designer, Software engineer Details : Snapon uses for its scanners a variety of tools, for translations and reports cna be generated for the scanner menus. During this period, I developed tools that supported this process. Program languages : Delphi 7, XML en SQL, MS SQL-server 2000 Methods en techniques : ERD

Period :	2003-6 ~ 2004-5	
Organization:	Ordina / Snap-on Diagnostics	
Project name:	Snap-on Authoring Tool	
Branch: Automotive industry		
Function: Analist, Designer, software engineer		
Method: SCRUM/	Prototyping	

Period	: 2002-7 ~ 2003-1
Organization	: OTB engineering
Project name	: HMI-PECVD
Branch	: Industrial automation
Function	: Designer en software engineer
Method	: Prototyping/SCRUM
Details	: The customer designs a serie-0 of a solar

Details : The customer designs a serie-0 of a solar cell production line. One of the machines in this line is the PECVD (Plasma Enhanced Chemical Vapor Deposition). Which makes a wafer of selenium into the (bluish) solar cell. It is a process in a vacuum and has about 15 automated steps.

The assignment was to design, develop and prototype a HMI (Human Machine Interface) in Delphi, that can control this PECVD. In reality, the Delphi HMI communicates via a Type Library with a B&R Automation PLC, via a number of actuators and sensors. During this project, specs were not fixed. Not on the HMI, but also on the number of sensors and actuators. In total this was a very challenging project.

Period	: 2003-3	~ 2003-6	
Organization	: Ordina	a / Cordis	
Project name	: Require	ements Management System	
Branch	: Medical supplier		
Function	: Analyst	, Designer, software engineer	
Languages	: C#		
Databases	: MSSQL	server	
Methods en techniques		: CFR part 11, Prototyping	

Details : Cordis is a supplier of medical equipment. Everything that is involved in the production process must be fully documented according to the American CFR Part 11 regulations. For software it means that every software change must be fully documented and backward retrievable. This makes coding for Cordis an effort where 50% of the time is spent on documentation! Together with a colleague, we have designed a system that stores those changes in a mssql server database. Via a report function, it is possible to generate the documentation for a given date. This was my first C#.net project.

Period	: 1999-2001
Organization	: Kalkzandsteen Harderwijk
Project name	: SaVe (Samen Verder)
Branch	: Industry
Function	: Software Engineer
Details	: Save Development (SaVe = Sa

Details : Save Development (SaVe = Samen Verder == Continue Together) for Kalkzandsteenfabriek Harderwijk. The project entails the construction of a system in which all business processes of the limestone plant are recorded. The project is therefore very diverse: Order of Commitment to mill through inventory planning. Save is a multi-tier system based on DCOM, with a Sybase 12.0 database. The reports in this system are made with QuickReport and Word OLE automation.

All construction, testing and maintenance activities are recorded in MKS Source Integrity. Progress is maintained in test track. With this tool, test results and fixes them down.

After in May 2001 followed a course Sybase ASE, I am also going to assist DBA work and I replaced the DBA there in his absence. In this capacity I also several times in KZF-Roelfsema been to a test version of Save to deploy.

The following activities were performed:

- Construction of stock user interface (about 20 screens)
- Design and construction of generic print tool for SAVE.
- Construction of part of Reservations Save.
- Construction of functionality to save to multiple databases to connect.
- Construction of pallet records Save

•Bug fixes.

•Duy lixes.	
Roles	: Software engineer/tester/Designer
Hardware	: Application server: Windows 2000 server, PC
Operating systems	: Windows 2000 server / Windows 2000 professional
Program languages	: Delphi, SQL
Data communication	: Ethernet
Databases	: Sybase 12.0
Tools	: Powerdesigner, Testtrack, MKS, Quickreport
Packages	: MS office

Period	: 2002-2 ~ 2002-6	
Organization	: TNT	
Project name	: SkyMaster/RoadMaster	
Branch	: Logistics	
Function	: Software Engineer Designer	
Details	: To the logistics business of TNT to support the Skymaster system was built.	
Allows the way of (since ft) and site and antipation of		

Allows the use of (aircraft) capacity are optimized.

The activities include aspects of the technical description of the modules already built by Skymaster and also writing the technical design for the Skymaster scheduler.

After building the Skymaster scheduler.

The following activities are performed:

• Aircraft Design Technical Details.

• Technical Design Tech Status frame.

• Design and construction of Skymaster scheduler.

Responsibilities and activities: Design of a portion of Skymaster, construction and test of Roadmaster

- Results: Skymaster en Roadmaster zijn beide in productieHardware: Server: Mainframe, Client: PC
- Operating systems : Windows 2000

Program languages : Delphi 5

: TCP/IP, Ethernet
: DB/2
: UML
: MS Visio/ PVCS, Installshield professional
: MS-office PVCS

Period	: 1999 ~ 2000	
Organization	: AIP- MPS Gemma	
Branch	: Agribusiness	
Function	: Software Engineer	
Details	: The Floriculture Environmental Project collects data from growers in the area	
of Energy, Fertilizer Control and Waste Water. This is the basis for Eco-label and MPS label. Full automation of		
MPS is done (see www.mps.nl)		
Role	: Software engineer. especially all functions and report building maintenance	
module for mps-qualification standards.		
Results	: MPS software in use in 2000	
Hardware	: PC	
Operating systems	: Windows NT	
Program languages	: Delphi/SQL/Quickreport	
Data communication en network	: Ethernet	
Databases	: MS-SQL server 7.0	
Methods en techniques	: ErWin	
Tools	:MS-Office/ Quickreport, MS Visual Source save	