Pieter De Witte

Senior Full Stack Developer & Manager

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Veelzijdige full stack web engineer en manager met uitgebreide ervaring in het ontwerpen, ontwikkelen, implementeren, onderhouden en beheren van webapplicaties. Meer dan 23 jaar ervaring in webontwikkeling. Gemotiveerd, autodidact, toegewijd en resultaatgericht. Succesvol in zowel startup- en enterprise-omgevingen. Teamspeler met constructieve houding.

Ervaring met het combineren van verschillende rollen: backend engineer, frontend engineer, database engineer, UI/UX designer, projectmanager, software architect, teamleider, people manager, devops engineer, product owner, etc. Gewend om nauw samen te werken met andere teams en klanten om hoogkwalitatieve producten op te leveren.

Eerste zelfstandige website uitgebracht in 2001, op 14-jarige leeftijd. Begonnen met het bouwen van websites op GeoCities, toen animated gifs trendy waren en afgeronde hoeken werden gemaakt door afbeeldingen in HTML-tabellen te plaatsen. Sindsdien is het bouwen van apps een passie.

Altijd enthousiast om nieuwe dingen te leren en het verschil te maken.

VAARDIGHEDEN

Programmeertalen	C#, JavaScript, TypeScript, Microsoft SQL, PowerShell, PHP, MySql, VBScript, Firebird SQL
Frontend technologiën	ReactJS, HTML, CSS, SASS, Tailwind, SolidJS, Vite, Parcel, Bootstrap, jQuery, Accessibility, Next.js, Angular, Webpack
Backend technologiën	ASP.NET Core, .NET 8, Node.js, Classic ASP, Razor Pages, ASP.NET MVC, Dapper, PHP
Cloud & overige	AWS Lambda, Amazon Simple Email Service, Amazon CloudFront, Amazon EC2, Cloudflare, DNS Configuration, Redis, Docker, Azure
Software	Visual Studio Code, Visual Studio, Jira (admin), Azure DevOps, Git, GitHub Copilot, Sentry, Adobe Photoshop, SQL Server Management Studio, CPanel, DirectAdmin, WordPress, GitHub, GitLab, JMeter, Adobe Illustrator, Zendesk (admin)
Soft skills	Team Lead, Project Manager, Product Owner, People Manager, Scrum Master, Mentor, Architect, UX Designer, UI Designer
Talen	Nederlands (moedertaal), Engels (vloeiend), Frans (basis), Duits (beperkt)

ERVARING

CheckMarket / Medallia - Remote   *2017 - Nu*
Senior Staff Software Engineer & Senior Manager
CheckMarket is gestart als een Belgisch SAAS enquêteplatform. In 2021 werden we overgenomen door Medallia, een wereldleider uit Silicon Valley. Medallia is het #1 enterprise experience platform voor ervaringen van klanten, personeel, burgers en patiënten.

- Leiding gegeven aan een multidiciplinair team van 17 softwareontwikkelaars en QA engineers, verspreid over drie continenten
- Ontwerpen van moderne app-architectuur ter verbetering van performantie, stabiliteit en ontwikkelsnelheid
- Samenwerking met management en andere teams om ambitieuze roadmap te plannen en uit te voeren
- Ontwierp en bouwde een rapportageoplossing die klanten volledige flexibiliteit biedt bij het samenstellen van rapporten die de meest nuttige info naar boven brengen
- Een aangepaste scripttaal ontwikkeld die klanten kunnen gebruiken om hun enquêtes en rapporten te personaliseren
- Mentor en coach voor teamleden, met focus op verbeteren van code-kwaliteit en snelheid
- Verbetering stabiliteit software, escalaties door klanten verminderd met 40%
- Diverse procesverbeteringen voorgesteld en uitgevoerd om de softwareontwikkeling aanzienlijk te versnellen, waaronder CI/CD
- COM Interop oplossing geïmplementeerd voor het gebruik van moderne .NET code binnen klassieke ASP apps
- Diverse ingrijpende UI/UX-verbeteringen ontworpen die de software moderner en gebruiksvriendelijker maakten
- Oplossing ontwikkeld voor verzenden van grote emailvolumes, om e-mail workflows te stroomlijnen en de schaalbaarheid te verbeteren

BMI Leisure - Geel, België   *2009 - 2017*
Software Developer & Project Manager

Wereldleider in software voor kartings en entertainment centers, met SAAS oplossingen voor alle aspecten van de zaak.

- Leidde een project om de IT-activiteiten voor een van Europa's grootste metal muziekfestivals te moderniseren, door software te bouwen om bezoekers te scannen, personeel te registreren, communicatie te verbeteren, enz.
- UI/UX ontworpen en geïmplementeerd voor verschillende veelgebruikte applicaties
- Internationaal team aangestuurd, met oplevering van hoogkwalitatieve innovaties, binnen budget en deadlines
- Tijd met klanten gespendeerd om hun behoeften te begrijpen en oplossingen op maat te implementeren
- Diverse web- en mobiele apps geïmplementeerd met moderne webtechnologieën

Straffe Koffie - Oud-Turnhout, België   *2008 - Nu*
Website-ontwikkelaar

Zelfstandige in bijberoep, gericht op websites en oplossingen voor lokale bedrijven.

- Bouwen van aangepaste WordPress websites voor lokale bedrijven, mobielvriendelijk en geoptimaliseerd voor zoekmachines
- Betrouwbare CPanel en DirectAdmin webhosting voor klanten, met Postmark om email deliverability te verbeteren
- Voorbeeld: gevelrenovatiesvandun.be: website en logo voor bedrijf van gevelrenovaties en reinigingswerken
- Voorbeeld: justfoods.be: meertalige website voor biologische voedselproducent
- Voorbeeld: barzoen.cafe: website voor lokale brasserie en concertlocatie

ONDERWIJS

Thomas More University of Applied Sciences - Geel, België   *2006 - 2009*
Bachelor Toegepaste Informatica - Afgestudeerd met grootste onderscheiding

Extra certificaten en cursussen: Microsoft Certified Professional / Microsoft Certified Technology Specialist .NET Framework 4 / WPF / Data Access (2010 - 2015), Practical Leadership Skills (2023), Introduction to Growth Mindset (2023), Form & Lead Your Virtual Team (2023), Manager's Guide to Difficult Conversations (2023), Better Virtual Meetings (2023), Microsoft Azure (~2015), English For Business (2009)

REFERENTIES

> Pieter is one of the most incredible engineers and team player that I have had the pleasure to work with.

Brandon Smith
Sr. Manager van Pieter bij Medallia

> He's the captain you need to ride the storm. Not afraid of making his hands dirty and enjoying the times of diving into the code.

Bart Mertens
Teamgenoot bij CM & Medallia

> Ik ben ervan overtuigd dat Pieter het verschil zal maken bij eender welk bedrijf.

Philippe Van Elst
CEO van BMI Leisure (toen)

> Pieter is an overperformer who consistently exceeds expectations, not only with his technical expertise but also with his outstanding ability to lead and support his team.

Abhishek Bhardwaj
Teamgenoot bij Medallia

> I am particularly impressed by Pieter's ability to do more management work than some actual full-time managers, all on top of doing regular development.

Filip Meszaros
Teamgenoot bij Medallia

> Pieter has strong communication skills, excellent troubleshooting abilities, and is highly goal-oriented.

Erwin Dockx
Teamgenoot bij CM & Medallia

ADDENDUM: PROJECT DETAILS

Migration from Classic ASP to .NET 8
2021 - 2024

To improve scalability and reduce costs, we set a multi-year target to move our software to a cloud-agnostic Docker/Kubernetes architecture. The first and biggest initiative was to move from Windows to Linux, which required us to move away from Classic ASP.

I architected a solution that allowed us to gradually move from Classic ASP to .NET, page by page. This resulted in a regular release cadence and minimal impact on clients.

The backend was built using ASP.NET Core Razor Pages and WebAPI, using Dapper for data access. The front end used micro frontends based on React, TypeScript, and an in-house component library. I ensured we had building blocks to reduce boilerplate and make development straightforward.

The team consisted of junior, medior, and senior profiles. I implemented processes to give everyone ownership over their work. There were clear guidelines and regular check-ins to ensure nobody was blocked.

Tech   C#, .NET 8, ASP.NET Core, React, TypeScript, Dapper, MS SQL, Micro frontends
Role   Project manager, team lead, architect, product owner, full stack developer, scrum master
Team size   8 (2 backend developers, 2 frontend developers, 1 database developer, 1 manual QA, 1 automation QA, and I)
Business   CheckMarket / Medallia

New Survey Interface
2024

The survey interface was the most important part of our software. It was used by millions of people every month to respond to surveys. As part of the migration initiative, the survey interface needed to be migrated to .NET 8. Its architecture needed to be future proof to support future growth and development.

The existing in-house React component library didn't tick the right boxes for this project. We needed something that was fast, light and stylable. I managed to set up a collaboration with the company's UI team to build a new component library for this project, and SolidJS was chosen as the FE library.

I built several POCs to find the optimal stack and eventually built the frontend, backend and database foundations myself. This resulted in a full end to end prototype that was ready to be worked on by multiple developers. To ensure top quality code, I implemented Test Driven Development (TDD), Dependency Injection, extensive linting, and more. I used load testing early on to ensure everything was performant and scalable.

Tech   SolidJS, TypeScript, C#, .NET 8, ASP.NET Core, MS SQL, MS Test, Moq, JMeter
Role   Project manager, team lead, architect, product owner, full stack engineer (frontend, backend, database)
Team size   4 (1 frontend engineer, 1 backend engineer, 1 full stack engineer and I) + external UI development team
Business   CheckMarket / Medallia

High Throughput Email Solution
2023

I architected and implemented a new email solution to replace an outdated and slighly instable system. The new system provided one unified way of handling outgoing emails. Traceability was improved by storing all those emails in a database, replacing temporary files on web servers. By closely integrating with AWS, we were able to link every single bounce and complaint to the original email.

The solution was highly scalable. Using multiple multi threaded micro services, emails went out nearly instantaneous. The system also ensured that every outgoing email was fully compliant, respecting SPF and DKIM.

As part of this project, I also ensured that our sending practices were aligned with the latest Google/Yahoo anti-spam guidelines.

Tech   C#, .NET 8, AWS Simple Email Service, Dapper, MS SQL
Role   Architect, Developer
Team size   2 (1 database engineer and I)
Business   CheckMarket / Medallia

Environmental: Developer Productivity Tool

2022

After noticing that the team often lost valuable time with repetitive chores, I decided to write a command line tool to automate some of those. This tool handled some configuration and git chores when switching between development environments. It also allowed developers to quickly launch pull requests.

Tech   C#, .NET 8, Git
Role   Developer
Team size   1
Business   CheckMarket / Medallia

Media Library & Media Picker

2020

The CheckMarket Media Library was about 15 years old and needed to be made more user friendly. After some research, I proposed a new UI and architecture. I implemented a modern drag and drop UI that was both powerful and easy to use.

To generate thumbnails and resize images, I built a highly scalable serverless solution using NodeJS, running on AWS Lambda@Edge. It allowed specifying dimensions using URL query params. If the requested image version already existed on S3, it would simply return that. If not, it would create it, save it, and then return it. This ran in a matter of milliseconds. It also saved bandwidth and improved loading times by providing webp versions of images whenever the user's browser supported it.

Tech   C#, .NET 8, ASP.NET Core, Node.js, React, TypeScript, Redux, Bootstrap, SASS, AWS Lambda@Edge, AWS S3, Sharp
Role   Architect, designer, full stack developer (frontend + backend + database + cloud)
Team size   1
Business   CheckMarket / Medallia

CheckMarket ReportBuilder

2019

The CheckMarket ReportBuilder was built to replace an outdated reporting solution. Our clients wanted more ways to visualize data. This required a new solution, built from the ground up.

I designed and built a reporting solution that was easy to use and still extremely powerful. The UI was built as a React Single Page Application. It featured a live preview of changes and a undo/redo option. Clients could fully customize reports to match their house style using simple controls and even custom CSS.

The backend was built using ASP.NET Core, putting the foundations for many future ASP.NET Core projects. It also featured a "Smart report" option, which created a custom report based on the content of the survey. This shared a lot of code with the UI, so it was built using Node.js.

To ensure a smooth user experience and fast system performance, there were several performance optimizations such as caching, lazy loading, debounced bulk saving, etc.

Tech   React, TypeScript, Redux, Bootstrap, SASS, C#, .NET 6, ASP.NET Core, Dapper, Node.js
Role   Architect, designer, full stack developer (frontend + backend), devops engineer
Team size   2 (DB developer and I)
Business   CheckMarket / Medallia

Custom Domain Automation

2019

As our client base kept growing, more clients wanted to use a custom domain to personalize their surveys. Setting up those domains was a tedious manual process, including lots of back and forth with clients. To save time, I proposed a plan to automate this fully.

I created a solution that allowed clients to set up a custom domain without any intervention from the engineering team. After providing all details, clients would receive a page with the required DNS records. This page also indicated whether their DNS records were already correctly configured or not.

Once clients had configured all DNS records, a background process would configure all infrastructure correctly on Amazon Web Services (AWS). After completion, clients could use their domain name to personalize their surveys and emails.

Tech	AWS CloudFront, AWS Route53, AWS Simple Email Service, AWS Certificate Manager, C#, .NET 6, ASP.NET Core, AWS SDK, Bootstrap
Role	Architect, full stack developer (frontend + backend + database), AWS devops engineer
Team size	1
Business	CheckMarket / Medallia

Custom Scripting Language (CSL)   *2019*

Many clients wanted more personalization and customization options for their surveys. There was an old system with variables but it was limited and the implemenation varied throughout the software.

I designed a new powerful system with variables and operators, based on Handlebars. This allowed for nested variables and advanced scripting. It was implemented in a uniform way throughout the different product areas: surveys, reports, custom logic, etc. By using COM interop (ClassicBridge), even the Classic ASP code could utilize this scripting language.

Based on client feedback, this was expanded over time. I added additional operators for UI like tooltips, modals, icons, etc.

Tech	C#, .NET Standard, Handlebars, Dapper, MS SQL
Role	Architect, backend developer, database developer
Team size	1
Business	CheckMarket / Medallia

COM Interop between Classic ASP and .NET   *2019*

The biggest part of our software was still written in Classic ASP, but all new development was done in .NET. We needed to allow Classic ASP to invoke this .NET code as well, but there was no good solution for this.

I came up with a COM interop solution to expose the full power of our modern .NET Core codebase to Classic ASP, with very limited boilerplate code. This was a big boost to our development speed, since we didn't have to jump through hoops anymore to bring new features to Classic ASP. This was used to bring several impactful features to our Classic ASP code, including CSL, Caching, Email sending, etc.

By building the right scripting and pipelines around it, deployments were fully automated.

Tech	VBScript, Classic ASP, C#, .NET 6, .NET Framework, COM interop, PowerShell
Role	Architect, developer, devops engineer
Team size	1
Business	CheckMarket / Medallia

CI/CD Solution   *2017*

To speed up development and releases, I set up Continuous Integration, enabling automatic builds, unit tests, and deployments to our test environments. This was built using PowerShell, and run using Azure DevOps pipelines.

I also configured Continuous Delivery to production, replacing manual processes like FTP. With the new solution, you could mark a commit for production and it would automatically go live after all checks passed successfully.

During this process, I also moved all code over from TFVS to Git.

Tech	Azure DevOps, AWS CodeDeploy, PowerShell, Git
Role	Architect, devops engineer
Team size	1
Business	CheckMarket / Medallia

Music Festival Digitization
2010 - 2012

We took on a challenging project to bring one of Europe's biggest metal music festivals to the digital era. We built and operated software for crew registration, visitor ticket scanning, and more. One of the most visible impact was the software to run all the video screens across the festival terrain. We displayed the line-up, any important information and even live football games.

As the technical project lead I was involved with building the different apps. I was in close contact with different stakeholders including the festival organizers, to ensure everything went according to plan. During the festival, we ran a editorial team to control all content on the screens.

Tech   C#, .NET Framework, WPF
Role   Technical Project Lead, developer
Team size   10
Business   BMI Leisure

Karting Positioning Software
~ 2014

We built a real time kart positioning system. This software had multiple use cases, including safety: if a kart crashed, it would automatically slow down karts approaching the stopped vehicule. It also made it possible for friends to easily see where everyone was on the race track.

As a technical project lead, I oversaw multiple test setups in karting tracks across Europe. We did trials with different hardware systems to find the perfect match. I worked together with an offshore engineer for the position algorithms, and developed the more visual aspects myself.

Tech   C#, .NET Framework, WPF
Role   Technical Project Lead, developer, UI designer
Team size   2 (1 offshore developer and I)
Business   BMI Leisure

Karting TV App
2009 - 2010

One of the most visible parts of karting software was the live display on the TV's throughout the karting center.

As one of my first projects at BMI Leisure, I was tasked with creating new software that was more visually appealing. I worked together with an offshore developer that created a DirectX 3D engine that served as the underlying graphics layer. I built a modern UI that showed live racing data and other content the karting center wanted to display.

This product was the start of our "high end" UI/UX journey that got us ahead of the competition and helped us capture the top end of the market.

Tech   C#, .NET Framework, DirectX
Role   Developer, UI designer
Team size   2 (2 offshore developer and I)
Business   BMI Leisure

Just: Multilingual Wordpress Website
2020 - 2022

I built the official website of Just, a Belgian organic food producer. The website featured information about all products and where to find them. There was also a blog about healthy food habits.

The website was built using Wordpress and Elementor. I added some customizations using TypeScript and SASS. I proposed to use WooCommerce for the product pages, so we could easily add a web shop in the future if required.

Tech   WordPress, PHP, SASS, Adobe Photoshop, WooCommerce, Elementor
Role   Web developer
Business   Straffe Koffie

Van Dun: Website and logo design

2020

I designed a house style, including logo for this young home renovation business. It was meant to be a clean, modern design. The website features a few before/after sliders. The website was built using Wordpress, and some customization were built using PHP. The customized styling was built using SASS.

Tech	WordPress, PHP, SASS, Adobe Photoshop, Adobe Illustrator
Role	Web developer, web designer
Business	Straffe Koffie

Mighty: Website Build and Deployment Library

2019 - 2020

To consolidate the code to build and deploy web sites, I built a Node.js library called "Mighty". It uses Parcel to build and minify files. It can also deploy these files to a pre-configured FTP server. This library massively improved the speed of setting up new projects and deploying them.

Tech	Node.js, TypeScript, Parcel
Role	Developer
Business	Straffe Koffie

La Ritournelle: Vacation Rental Website

2019

I built a website for a holiday home using React Static, a Static Site Generator (SSG). It featured a booking module that integrated with the host's agenda using ical. All dynamic server code it was built using PHP. There was also a ReCaptcha integration to prevent bots from submitting forms.

Tech	React, TypeScript, React Static, Reactstrap, Markdown, PHP
Role	Web developer, web designer
Business	Straffe Koffie

Expense Tracker App

2022

To track and categorize our expenses, I built a .NET console application. It imports data from our bank and credit card, and allows us to add categories and comments to all expenses. It supports smart rules to automatticaly apply the right categories.

There's a number of data visualization options to see patterns and timelines.

Tech	C#, .NET 8, Spectre
Role	Developer, hobbyist
Business	Hobby

Home Automation Enhancements

2014

I built a .NET console application to extend our home automation. For example, it used a API to close the blinds if it got too hot outside, or open them to prevent damage due to an upcoming storm. It could also control our Sonos speaker and third party smart plugs.

As a result, our house got an infamous Barry White button. When pressed, the lights would dim and a Barry White song would start playing through the speakers.

Tech	C#, .NET Framework, Loxone, HTTP, TCP, Git
Role	Developer, hobbyist
Business	Hobby

The Ska Is The Limit: Concert Series

2008 - 2012

For five years I organized a concert series in Turnhout (BE), featuring some amazing international artists. These concerts were always very popular, and attracted visitors from far away. I organized everything, ranging from from artist booking, sponsorships, advertising, etc.

Role   Organiser, artist booker
Business   Hobby

Backstage: Band Management Web App   *~2007*

I was in a music band with a total of 11 members. To help manage everything, I created a web app for everyone members to discuss things and keep things organized.

The web app was built using PHP and used a MySQL database. Among other things it featured a message board, calendar, and a collection of all recorded music.

Tech   PHP, MySQL, HTML, CSS, JavaScript
Role   Developer, hobbyist
Business   Hobby

WebAward.nl: Website Review Service   *~2001 - 2003*

The first web app I built, at the age of 14. Possibly younger, but that's the oldest artefact I found on the Wayback Machine :) People could submit their website to receive a review. Then someone would check their website and give feedback. If the website had a good UI/UX, it could win a golden award. That was an image people could place on their website, and many did! I eventually found some volunteers that helped me out with the reviews.

This was built using Perl, that was the first language I tought myself. I had lots of fun and learned a lot.

Tech   Perl, MySQL, HTML, CSS, JavaScript
Role   Developer, hobbyist
Business   Hobby