

# **Pieter De Witte**

Senior Full Stack Developer & Senior Manager

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Well-rounded full stack web engineer and manager with extensive experience in defining, designing, developing, deploying, maintaining, and managing web-based applications. Over 23 years of experience in web development. Self-motivated, self-taught, dedicated, and results-oriented. Proven myself in startup and enterprise environments. Collaborative and humble attitude, ready to work in a lead role or as an individual contributor.

Experience combining different roles: backend engineer, frontend engineer, database engineer, UI/UX designer, project manager, software architect, team leader, people manager, DevOps engineer, product owner, etc. Used to working closely with other teams and clients to deliver high-quality products.

Released first standalone website in 2001, at the age of 14. Started building websites on GeoCities, when animated gifs were trendy and rounded corners were built by chopping up images and placing them in HTML tables. Building apps has been a passion ever since.

Always eager to learn new things and help grow businesses.

### **SKILLS**

Programming Languages C#, JavaScript, TypeScript, Microsoft SQL, PowerShell, PHP, MySql, VBScript, Firebird SQL

Frontend Technologies ReactJS, HTML, CSS, SASS, Tailwind, SolidJS, Vite, Parcel, Bootstrap, jQuery, Accessibility, Next.js, Angular,

Webpack

Backend Technologies ASP.NET Core, .NET 8, Node.js, Classic ASP, Razor Pages, ASP.NET MVC, Dapper, PHP

Cloud & Others 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

Languages Dutch (native speaker), English (fluent), French (basic), German (minimal)

#### **EXPERIENCE**

### CheckMarket / Medallia - Remote

2017 - Present

### Senior Staff Software Engineer & Senior Manager

CheckMarket is an SAAS enterprise survey platform, founded in Belgium. In 2021 we got acquired by Medallia, a global leader based in Silicon Valley. Medallia provides the #1 enterprise experience platform for mission critical insights and action.

- · Lead a global cross-functional team of 17 software and QA engineers across three continents
- Designed modern app architecture using .NET 8 and ReactJS to improve performance, stability and development speed
- Worked with executives and other teams to plan and execute ambitious roadmap
- Designed and built reporting solution giving clients full flexibility in building reports that show the most important information, matching their house style
- Built a custom scripting language that clients can use to personalize and enhance their surveys and reports
- Provided mentorship to team members, coaching them to improve code quality and speed
- Improved software stability and reduced customer reported incidents by 40%
- Proposed and executed several process improvements to speed up development significantly, including CI/CD
- Implemented COM Interop solution to enable usage of modern .NET code inside Classic ASP apps
- · Designed several impactful UI/UX improvements that made the software more modern and easier to use
- Developed high volume email solution to unify email workflows and improve scalability

Software Developer & Project Manager

World leader in karting and entertainment center software, offering SAAS solutions for all aspects of the business.

- Lead a project to modernize IT operations for one of Europe's biggest Metal music festivals, building software to scan visitors, register crew, improve communication etc.
- Designed and implemented UI/UX for several highly used applications
- Lead projects with international team, delivering high quality innovative features, respecting deadlines and budget
- · Spent significant time with customers to understand their needs, and implement tailored solutions
- Implemented several web and mobile apps using modern web technologies

### Straffe Koffie - Oud-Turnhout, Belgium

2008 - Present

Website developer

Self employed secondary occupation, creating websites and solutions for local businesses.

- · Built custom WordPress websites for local businesses, mobile friendly and search engine optimized
- · Provided reliable CPanel and DirectAdmin web hosting for clients, using Postmark to enhance email deliverability
- Example: gevelrenovatiesvandun.be: website and logo for local construction business
- Example: justfoods.be: multilingual website for organic food producer
- Example: barzoen.cafe: website for local bar/restaurant and concert venue

#### **EDUCATION**

**Thomas More University of Applied Sciences** - Geel, Belgium Bachelor Applied Computer Sciences - Summa Cum Laude (With Highest Praise) 2006 - 2009

Extra certifications and courses: 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)

# **TESTIMONIALS**



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



Brandon Smith
Sr. Manager of Pieter at 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
Team mate at CM & Medallia



I am confident Pieter will make the difference at any company.



Philippe Van Elst CEO at BMI Leisure (at the time)



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 Team mate at 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 Team mate at Medallia



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



Erwin Dockx Team mate at CM & Medallia

### 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

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

Business CheckMarket / Medallia

### Media Library & Media Picker

2020

2019

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

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 implementation 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 automattically 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