de Wit Software

Full-stack development

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About me

I am a passionate game developer with a strong focus on creating innovative and high-performance gaming experiences. With extensive experience in Unity and C#, I have developed multiplayer games, optimized game performance, and implemented AI using machine learning. I thrive on tackling technical challenges, from designing game mechanics to optimizing low-level systems, and have a keen interest in game development, full-stack web-development and embedded software projects.

For references and more details on the projects described here and other (personal) projects, visit my website (dewitsoftware.nl)!

Education

HU University of Applied Sciences Utrecht
Bachelor's degree, HBO-ICT
2014 - 2018
Cum Laude (GPA 4.0)
Student identification number: 1641329

1+ years of professional experience

*Featured expertise **in bold** - In no particular order*

Unity, AWS, C#, Typescript, Node.js, CI/CD, Accessibility (WCAG), Agile/Scrum, Angular V2+, ArgoCD, Asynchronous Programming, CSS, Cloudflare, Code Reviews, Cross-Browser Compatibility, Docker, Dynamic web maps, Expo, Express.js, GCP, Git, GitOps, Github Actions, GraphQL, HTML, HUGO, Jasmine, JavaScript, Karma, Kubernetes, MySQL, NPM, NestJS, NoSQL, Performance Optimization, Postgres, RESTful, RXJS/NGXS/NgRx, React Native, Responsive design, SASS, SEO Best Practices, Stripe, TypeORM, UX/UI Best Practices, Unit Testing, Web Security

Highlighted project

BuddyBall — **May. 2022 - Oct. 2022; 5 months**

Blender, C#, Photon Fusion, Unity

Video of this project (Youtube), Link to the game (itch.io). This is my winning submission of the Back to School Multiplayer Game Jam 2022, under the category "Best competitive Gameplay".

I developed a multiplayer e-sports game in Unity using C# and Photon Fusion for multiplayer, along with machine learning (Unity ML-Agents) for AI opponents. Although unfinished, it is playable. Performance optimization and scalable architecture were key priorities. I also developed a minimalist component based framework for the UI, using Unity UI Toolkit, which enhanced my understanding of web frameworks like Angular and React.

Express Me — **Jul. 2024 - Ongoing;**

AWS, Android Native, Expo, Github Actions, Java, Micronaut, Postgres, RXJS/NGXS/NgRx, React Native, Typescript

Co-developing Express Me, an app that assists people with speech impairments, using a React Native front-end and a Spring Boot back-end, deployed in an AWS cloud environment. I'm excited to share more about this project in person! ExpressMe

Software Engineer — **Jan. 2023 - Jun. 2024; 1 year, 5 months**

Alliander

AWS, Angular V2+, Dynamic web maps, GitOps, Github Actions, Kubernetes, NestJS, Node.js, Postgres, RXJS/NGXS/NgRx, TypeORM, Typescript

At Alliander, I worked as a full-stack developer, responsible for developing and maintaining a custom front-end (Angular) and backend (Node.js/NestJS/Postgres) for an application managing power grid issues. I led the migration of our deployment from Openshift to an AWS EKS cluster and guided the transition from a SAP HANA-based data architecture to an AWS-hosted architecture, collaborating closely with stakeholders to develop technical solutions.

Lead Platform Developer — **Apr. 2020 - Apr. 2022; 2 years, 1 month**

SyncVR Medical

Angular V2+, C#, Cloudflare, Express.js, GCP, Github Actions, GraphQL, JavaScript, MySQL, NoSQL, Node.js, RXJS/NGXS/NgRx, Typescript, Unity

At SyncVR, I was the lead web developer, responsible for developing and maintaining a custom platform with an Angular front-end and Node.js/Express backend on Google Cloud. I led the platform's evolution from an internal tool to a comprehensive system for remote device management and app store features, eventually refactoring it to migrate from Firestore to MySQL, using a GraphQL implementation I developed. I also collaborated with stakeholders and mentored students on VR applications.

Arcadable — **Nov. 2019 - Apr. 2020; 6 months**

Arduino, C++, KiCad

Video of this project (Youtube) I developed a custom gaming table from scratch, focusing on embedded software and hardware. The project includes designing a PCB with KiCad and creating ArcadableScript, a custom interpretive programming language that runs on a Teensy MCU or via a VSCode extension, all built from scratch. A key challenge was optimizing performance to drive a 42x42 LED display using two MCUs in parallel, while also handling audio and game logic. More details are available in in this blog post (Medium) and this repository (Github).

Web Developer — **Feb. 2018 - Nov. 2019; 1 year, 10 months**

Targomo

Angular V2+, Dynamic web maps, Express.js, HUGO, JavaScript, Node.js, RXJS/NGXS/NgRx, Stripe, Typescript

During my graduation internship at Targomo, I researched and set up online documentation for the company's APIs. After the internship, I was hired to maintain and update the API documentation website (HUGO). Additionally, I implemented and maintained a custom front-end (Angular) and backend (Node.js/Express) for managing SCA-compliant payments with Stripe and led the development of two custom web-applications.

VR Developer Internship — **Sep. 2016 - Feb. 2017; 6 months**

Bricks & Goggles

Blender, C#, Unity

At Bricks & Goggles, I did an internship. During this internship, I helped developing Virtual Reality applications for the Oculus Rift. I also developed Unity plugins which allowed the team to make more accurate time estimations, and reduced the time required to import and prepare/optimize architectural models to be used for VR. I did research on performance optimizations for VR in Unity/C#.