






# Curriculum Vitae


 **Tycho Henzen**


 **Software Engineer**

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## Summary

Versatile and innovative **Software Engineer** with 8+ years of experience in **game development**, **industrial automation**, and complex software systems. Expertise in **C#**, **C++**, and **game development**, with a strong background in **performance optimization**, **network programming**, and **algorithm development**. Passionate about exploring challenging problem domains and developing creative solutions..

## Skills

### Programming languages

- **C#**
- Python
- XAML
- PHP
- **C++**
- HTML
- typescript
- SQL
- Java
- CSS
- javascript

### Frameworks // Tools

- **Unity**
- Godot
- Specflow/Reqnroll
- TFS
- Visual Studio
- Jenkins
- Microsoft Azure
- Git
- LINQ
- Doctest
- Catch2
- MySQL
- Blazor
- JetBrains IDEs
- NUnit
- TeamCity
- Svn
- WPF
- Bootstrap

### Soft skills

- Analytical thinking
- Problem solving
- Communication
- Self-motivation
- Attention to detail
- **Agile**/Scrum
- Adaptability
- **TDD**
- Continuous learning
- Collaboration
- Resilience

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# Experience

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**Ellips B.V. Eindhoven**

Sep 2023 - present

*Software Engineer*

- Developed **C#**/Blazor/WPF frontend with **C++** backend components for a fruit grading system
- Implemented web apps for system calibration and addressed localization issues
- Contributed to code modernization and improved testing methodologies

**VRee B.V. Eindhoven**

Nov 2019 - Jun 2023

*Software Engineer*

- Developed and maintained **C++** and **C#** code for a multiplayer **VR** platform
- Designed and implemented network architecture using **UDP/TCP** protocols
- Created an algorithm to package whole-body motion tracking into a single **UDP** fragment
- Built a licensing system with online verification via **REST API** and **RSA/AES** encryption
- Implemented tamper-proofing using **blockchain** hashing techniques
- Utilized **TDD**, clean coding practices, and design patterns to improve code quality
- Worked with **CI/CD** pipelines and automated testing using Jenkins, Catch2, and Doctest

**Graylake studios, Utrecht**

2015 - 2019

*Software Engineer*

- Contributed to the development of ProDnD, a mobile app for generating procedural, themed battle maps for Dungeons Dragons
- Worked on **performance optimization** for map generation, and procedural battlemaps
- Created a technique for map sharing using **steganography**, and procedural name generation
- Developed systems using **C#** in **Unity**, including **iOS** port and theme swapping

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# Education

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**ICT / Software Engineering**

2010 - 2015

*Fontys Hogescholen, Eindhoven*

- Minor in Game design
- Elective course on OpenGL in C++
- Elective course on linear algebra for 3D rendering

**Bachelor technische informatica**

2009 - 2010

*TU/e, Eindhoven*

**VWO**

2008 - 2009

*Rythovius college, Eersel*

**VWO**

2003 - 2008

*Grotius college, Heerlen*