

# Tom Semeijn

*C++/C# Programmer*

Motivated | Curious | Reliable | Engaged

## About me

Hi! My name is Tom.
I am passionate about programming and nature.
I have professional experience working on entertainment games, applied games, medical software, websites, and automation.

## Portfolio

My full portfolio can be found on: tomsemeijn.com.

## Personal info

The public version of this CV does not contain privacy-sensitive information.
A full CV will be sent to companies I officially apply to.

## Contact


linkedin.com/in/tom-semeijn

contact@tomsemeijn.com


## Skills

### Programming Languages

| | | |
|---|---|---|
| C++ ●●●●● | C# ●●●●○ | C ●●●●○ |
| Lua ●●●●○ | GDScript ●●●●○ | AutoHotkey ●●●●○ |
| Python ●●●○○ | Powershell ●●●○○ | Java ●●○○○ |

### Web Development

| | | |
|---|---|---|
| HTML/CSS/JS ●●●●● | SQL ●●●●● | PHP ●●●●● |
| TypeScript ●●●●○ | ReactJS ●●●○○ | LESS ●●○○○ |

### SCRUM

| | | |
|---|---|---|
| Jira ●●●●● | Trello ●●●●● | Monday.com ●●●●○ |

### Continuous Integration

| | |
|---|---|
| Jenkins ●●●○○ | TeamCity ●●○○○ |

### Game Engines

| | | |
|---|---|---|
| Unreal Engine 4&5 ●●●●● | Unity ●●●●○ | Godot ●●●●○ |

### Languages

Dutch: Native

English: Near-Native

## Featured Projects

### Apps and Applied Games for Revalidation




I worked on many apps and games in Unity/C# meant to train people with acquired brain damage to use coping strategies for their new disabilities.

### Cabinet of Curiosities



Multidisciplinary custom engine project in C++ where I worked on gameplay, graphics, and tools.

### GMTK jam 2020: Clown Snatchers



3D UE4 game about drifting into clowns where I implemented the vehicle movement.

## Work Experience

### Medical Software Engineer
**Elekta (2024 - present)**

Current

I work on software for treatment management in Brachy Therapy, where radioactive sources are lead through the body to irradiate tumors internally. The software is used to plan out where the needles and catheters will go and how long the radioactive material will stay in which positions. It touches many aspects such as medical imaging, dose calculations, client/server connections, database management, cybersecurity, etc.

### VR Game Engineer
**Lesbian Simulator (2023 - 2025)**

Released Game

I worked on many parts of this Unreal Engine 5 VR game, such as real-time speech recognition, Meta Quest 2 porting, graphics/shaders, tools, and gameplay.
I've helped build the earliest demo's and I took on the most technically challenging tasks.

### Medical Software Developer
**Artinis Medical Systems (2023 - 2024)**

I worked on software for several medical/research devices using NIRS to non-invasively measure blood oxygenation.
I quickly and effectively adapted to the various devices, tools, and ISO quality standards to create robust consumer software and internal tools.
Aside from existing projects, I was also entrusted to create a big prototype using a novel third-party technology.
My colleagues describe me as a fast, communicative, and highly skilled worker.

### Applied Game Development
**Game Architect Studio (2022 - 2023)**

Released Games

This internship, I worked on many different projects at the same time. They include five apps, two lines of games, a web-app, and a game prototype. Consistently switching projects has made me very a flexible and adaptable programmer.
My main projects were targeted towards revalidation of people with acquired brain damage.

### Web-Development and automation for real-estate
**nieuwbouwinschrijving.nl (2018 - 2019)**

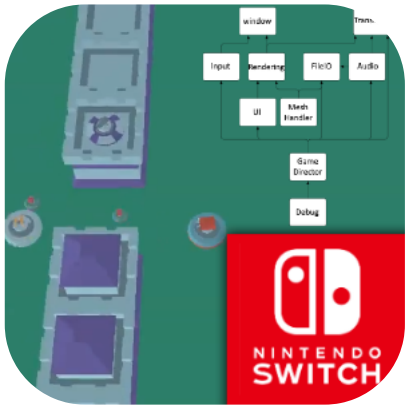
I had the task of automating the aqcuisition and processing the information of people opting in to new construction projects.
I improved the existing workflow within excel using VBA and then created a website that allows people to claim a home, manage their personal info, and generate PDF contracts.
I learned to work in a multidisciplinary professional environment and to plan and maintain an iterative project.

### Native Graphics for Nintendo Switch




In 6 weeks, I learned the native graphics API for the Nintendo Switch and wrote a deferred renderer.

### Custom ECS Engine for Nintendo Switch




I designed and implemented a custom data-oriented game engine in C++ built for Windows and Nintendo Switch.

## Miscellaneous Tools Experience

Blender
VR/AR Development
Draw.io (UML, Flowchart, Sequence Diagram)
MonoGame (XNA)
Google Play Console
TDD with SpecFlow/Reqnroll
Microsoft Azure APIs
MFC 14
UWP & XAML (Universal Windows Platform)
Jython (Python in Java)
Azure DevOps

## Education

### Creative Media and Game Technologies
Cum Laude
### Programming Track
### Breda University of Applied Sciences (2019 - 2023)

In the programming track of the Creative Media and Games technologies course at Breda University of Applied Sciences (formerly known as NHTV), I greatly improved my programming skills, learned to work in multicultural and multidisciplinary teams, and gained a lot of experience with programming on a low-level in C++.
I also learned about SCRUM, source control, and CI/CD.
Projects I worked on while in university can be found on this page of my portfolio.

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**Relevant Grades:**

- Graduation Grade: 10
- Total Average: 9.7
- *Note*: *I had the best cum laude diploma my study has ever given out.*

### Pre-University Education
### Baken Trinitas Gymnasium (2010 - 2017)

I became interested in programming during my highschool years at Baken Trinitas Gymnasium in Almere.
You can see the projects I worked on during this time on this page of my portfolio.

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**Relevant Grades:**

- English: 9.2
- Computer Science: 8.0
- Mathematics (scientific): 7.0
- Physics: 7.4
- Research Project Game Design and Development: 7.0

## Volunteering

### Working with orhpans and less-fortunate children in Ukraine (2016 - 2018)

Three times, I went to Ukraine with the WALO foundation. We went to camps where the children were having their summer vacation with playing materials we had gathered to organize daily events to give those kids a happier summer.
I learned about teamwork and (intercultural) communication.

### Animal Shelter (2015 - 2016)

I worked at an animal shelter (Dierenasiel Almere). I cleaned the cat and dog enclosures, the shop, and the meeting room and I took the dogs for walks.
I enjoyed my time working here and it taught me to take initiative to seek out new tasks after finishing my main ones.