



## Contact

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## Skills

### Programming

C/C++ ●●●●●●  
C# ●●●●○  
Java ●●●●○  
Python (matplotlib, PyTorch) ●●●○○  
TypeScript ●●●○○  
SQL/PLSQL ●●●●●●  
OCaml ●●○○○

### Engines & SDKs

Unity ●●●●●●  
Unreal ●●○○○  
Varjo XR ●●●●○  
OpenCV ●●●○○

### Graphics & Shaders

GLSL/HLSL ●●●○○  
Direct3D 11/12 ●●○○○  
Vulkan ●●●●○  
3ds Max ●●○○○

### Web & Services

React ●●●●○  
Spring Boot ●●●○○  
Amazon AWS ●●●○○  
Microsoft Azure ●●●○○

## Languages

German (native)  
English (C2)  
Japanese (N2)  
Spanish (B1)

## Academic Performance

Max Weber Program 2021–present  
(Bavaria)  
Scholarship for gifted students  
JASSO Scholarship 2023–2024  
Merit-based scholarship granted  
to high-achieving students (Keio  
University, Tokyo)  
Second-ranked Graduate 2023  
B.Sc. Informatics: Games Engineering,  
TUM

## International Experience

High School Exchange, Oct. - Nov. 2017  
Washington D.C., USA  
Short Term Language and  
Cultural Exchange Program  
JLP Program, Keio Sep. 2023- Mar. 2024  
University, Japan  
Japanese Language  
Program

# Marina Weber

Games Engineer | C++ / Unity (Gameplay & Systems)

## Profile

Games Engineer with a passion for XR and real-time 3D experiences. Skilled in Unity, C++, and shader development, combining technical depth with strong aesthetic sense. Experienced in building interactive environments, procedural systems, and player-focused tools.

## Education

**M.Sc. Informatics** 2023–present  
Technical University of Munich  
**B.Sc. Informatics: Games Engineering** 2019–2023  
Technical University of Munich  
**Higher Technical Institute Diploma** 2014–2019  
HTBLA Kaindorf (Thesis 1.0)

## Selected Projects

**Exploring the Impact of LLM-powered Virtual Spaces on Privacy** 2025  
XR Research Project

- Developed a multi-room VR environment with integrated eye-tracking to analyze how gaze behavior reveals personal attributes (age, gender, BMI).
- Built full system support for Varjo and Apple Vision headsets in Unity, including player interaction and assistance via the OpenAI API.
- Conducted large-scale gaze data analysis using Python, Pandas, and Matplotlib to uncover behavioral and biometric correlations.

**A Functional Gamespace Model - Hierarchical Graphs and Spatial Partitioning Based on the Integrity of Space** 2023  
Bachelor Thesis

- Designed a hierarchical graph model with integrity-based spatial partitioning for 3D game worlds.
- Implemented automatic terrain segmentation using Voronoi-based partitioning from user-defined seed points (e.g., “forest”, “desert”) to procedurally generate coherent biomes.
- Developed Unity Editor tooling for defining regions and visualizing partitions, enabling rapid level design iteration.

**Tempora Facta Casa** 2021  
Serious Game – Collaboration with Architecture Department

- Developed an interactive 3D experience in Unity showcasing the natural aging and decay of wood in architectural structures.
- Created custom shaders and textures simulating material changes under varying conditions (wood type, weather, and lighting).
- Modeled and textured all assets in Blender to ensure visual consistency and realistic rendering.

## Work Experience

**BearingPoint GmbH** Mar–Apr 2023; Aug–Sep 2020  
Full-Stack Developer

- Built internal tools with **React/JS**, **SpringBoot**, and **SQL**; wrote reusable components and tests.
- Worked in **agile** sprints; ensured clean APIs and maintainable code.

**Itec Tontechnik & Industrieelektronik GmbH** Aug 2018; Aug 2017  
Low-Level Intern

- Programmed and debugged **C** firmware for audio/control hardware using oscilloscopes and in-circuit tools.

**Weboffice IT Service & Marketing GmbH & Co KG** Jul–Aug 2016  
Web Dev Intern

- Delivered client websites; set up basic CI and git workflows.

## Teaching Assistant, TU Munich

- Theoretics of Informatics (SS23–SS25):** Taught Turing machines, complexity, and formal languages.
- Software Engineering (SS22):** Supervised team projects; coached on clean, modular code.