



# Jonathan Bucher

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[Games Portfolio](#)

[GitHub](#)

[Itch.io](#)

[LinkedIn](#)

## Skills

### Game Engines

Unity (advanced, years of academic & personal projects)

Godot (intermediate)

Unreal Engine (basic)

### Programming

C# (advanced)

C++ (upper-intermediate; DirectX, OpenGL)

HLSL (basic)

C, Python, Java, SQL

### Others

Linux, Git, Blender,

LaTeX, Office 365, Inkscape, Krita

## Languages

### German (native)

### English (C1-C2)

Advanced / Near-native proficiency

Master’s studies in English

### French (B1)

Intermediate

Exchange semester at École Polytechnique de Montréal, courses in French

### Norwegian (A2)

Basic proficiency

Exchange semester at NTNU in Norway

## Summary

**Junior game programmer and Computer Science M.Sc. student** with a strong interest in gameplay systems, engine-level development, and performance-oriented code. Experience includes Unity (C#), C++, and real-time systems. Master’s thesis focused on performance optimization using Unity Jobs and Burst, with team-based development experience from university projects and game jams.

## Education

**Technical University of Munich (Germany)**

Apr 2023 - Dec 2025

M.Sc. Informatics

Expected Final Grade: 1.6 / 5.0 (1.0 = best)

Thesis (Unity): Enhancing Performance & Scalability of the SFS

Focus: computer graphics (image synthesis, geometry processing), parallel programming, robotics

**École Polytechnique de Montréal (Canada)**

Oct 2025 - Dec 2025

Game design, intelligent agents for games, extended reality development

**NTNU Trondheim (Norway)**

Jan 2024 - Jun 2024

Graphics and Visualization

**Technical University of Munich (Germany)**

Sep 2019 - Mar 2023

B.Sc. Informatics: Games Engineering

Final Grade: 1.9 / 5.0 (1.0 = best)

Thesis (Unity): Formal Gamespaces for Artificial Intelligence in Games

Focus: C++, low-level & OS programming, real-time graphics, game physics, interaction systems, game analysis

## Projects

**Master Thesis: Enhancing Performance & Scalability of the SFS - Unity**

Chunked & parallelized voxel flood-fill using Unity C# Jobs + Burst achieved 71× creation speedup and nearly constant-time runtime queries

**Autonomous Drone - C++, ROS**

Programmed an autonomous drone in a small team - visual tracking, navigation

**Le Ptit Alchemiste (VR) - Unity**

VR alchemy game university group project - gameplay & technical systems

**Mirror's Egg - Unity**

Semestergamejam: sandbox exploration game - gameplay

## Experience

**Itestra**

Oct 2023 - Dec 2023

Software Engineering Intern

Munich, Germany

Data migration from legacy system

Java, PostgreSQL, Elastic Search, Spring Boot

**Medigital (Auta Health)**

May 2023 - Oct 2023

Full Stack Developer Intern

Munich, Germany

Patient management web app for hospitals

React, Django, TypeScript, Python