

# Soren Saket

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[Saket Studio](#) – Software Developer – Aug 2024 - Present

- Created an Online Multiplayer Drawing Program using Saket.Engine, WebGPU, SDL2 and ImGui.
- Wrote support for various image and palette formats including .aseprite, .pyxel.

[Kong Orange](#) – Unreal Engine Programmer – June - July 2023

- Collaborated with designers to deliver gameplay features, through blueprints and C++ classes.

[AR Tour Guide, Departure Lounge](#) – Lead Unity Developer – Jan - Apr 2023

- Collaborated with an interdisciplinary team using agile methods, producing an IOS application prototype in 12 weeks.
- Implemented functionality including Augmented Reality with ARFoundation and Niantic Lightship, Machine Learning Hand Tracking (Mediapipe), Volumetric models w/ Microsoft Reality Capture Studio Toolkit & Arcturus HoloSuite.

Saket.Engine – Engine Programmer – Aug 2022 - Present

- Developed an Entity Component System (ECS) system and WebGPU Game Engine with unsafe C# code, manual memory management & pointers.
- Developed ECS-based Networking & Serialization library. Reliable UDP, Client-side prediction with Server reconciliation, Client fixed time dilation to mitigate packet loss and Entity interpolation to enable networking in real-time applications and games.
- Creating a custom Open Font Format OFF typography library. Using novel MSDF Rendering technique & WGSL shaders.

[C# Particle System](#) – Programmer – Jun - Aug 2022

- Implemented a CPU-driven Particle System in C#, as a learning exercise in High Performance Computing.
- Documented development process and performance theory behind it. Including details with CPU architecture, Multithreading, Memory access, SIMD.
- Increased performance by more than 80 times by using a data-oriented design compared to an object-oriented approach.

[Unity Editor Tooling](#) – Tool Programmer – Jun - Aug 2021

- Created a series of 3 distinct artist-friendly level editor tools in Unity C# that enable the creation of a 3D pixel art style.
- Created scene editor tool for creating 3D height map-based terrain, Procedural tree mesh generator and a runtime Minecraft-like tool to automatically create meshes from 3D tiles.

## Education

Centre for Digital Media	Master in Digital Media Capstone Course	Jan 2023 - Apr 2023	A+
Game Design Course	w/ Allan Kirkeby (former CEO Unity Studios)	Jan 2022 - Dec 2023	-
Erhvervsakademi Dania	AP Graduate in Computer Science	Sep 2021 - Jan 2025	10.6/12

## Skills

**Game Dev:** Unity, Unreal, Monogame (XNA), Pico8,

**Web:** Javascript, Typescript, CSS, SCSS, Markdown, Next.js, React, Vue, Svelte/Kit, Electron, Three.js, Babylon.js

**Languages:** C, C++, C#, Lua, Python, Latex, Rust, Zig, Odin

**Graphics:** WebGPU, WebGL, OpenGL, Vulkan, GLSL, HLSL, WGSL, Unity Shader Graph

**.Net:** C#, Visual Studio, Windows Forms, WPF, ASP.net, Blazor, Maui

**C:** C, C++, Dear ImGui, STB libraries, Raylib