Soren Saket

Software Engineer, www.saket.dk, saketsoren@gmail.com, linkedin.com/in/sorensaket

Collaborated with an interdisciplinary team using agile methods, producing an IOS application prototype in 12 ٠ weeks.

Lead Unity Developer

 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.

Developed a Entity Component System (ECS) system and OpenGL based 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 typography library. Using novel MSDF Rendering technique & GLSL shaders.

C# Particle System

Programmer

Jun - Aug 2022

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

BobDiBob

Game Developer

May - Jun 2022

- Worked in a team to create a Local Co-Op game for windows with C# Monogame (XNA) in 2 sprints.
- Created the underlying component based Object Oriented Game framework that allowed the developers on the team to collaborate on the same project with composition.
- Used a spatial hashing algorithm to increase performance for AABB collision testing in large simulations.

Unity Editor Tooling	Tool Programmer
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Jun - Aug 2021

- Created a series of 3 distinct artist-friendly level editor tools in Unity C# that enables 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
Game Design Course	w/ Allan Kirkeby (former CEO Unity Studios)	Jan 2022 - Dec 2023
Erhvervsakademi Dania	AP Graduate in Computer Science	Sep 2021 - Jan 2024

Skills

Unity, XNA (Monogame), DotNet, Visual Studio, WPF, ASP.net, Blazor, Maui - Javascript, Typescript, CSS, SCSS, React, Vue, Svelte/Kit, Electron - C#, C, Lua, Python, C++, Latex, Rust, Zig - OpenGL, Vulkan, GLSL - Dear ImGui

Engine Programmer

Jan - Apr 2023

Aug 2022 - Present

Saket.Engine

AR Tour Guide, Departure Lounge