

Jim Eckerlein

Software Engineer

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EXPERIENCE

GPU Software Engineer, UX3D GmbH

January 2019 — Present

Development on [Gestaltor](#), the company's product, using Qt and C++. Engine and middleware development in C++, Vulkan, and OpenGL

Contribution to the [official Khronos glTF Sample Viewer](#) and adding support for Draco mesh compression to the [official Blender glTF Importer and Exporter](#)

Software Developer,

MBS Electronic Systems GmbH & Co. KG

June 2017 — December 2018

Implementation of a PDF rendering widget in C++, QML, Qt Quick targeting an embedded device

[Reference](#)

Trainee, ESR Labs GmbH

September 2015 — July 2016

Implementation of CAN message sender and receiver on an Arduino device

Construction of Hardware on which the software implementation is supposed to run on

[Reference](#)

EDUCATION

Technical University of Munich

October 2018 — Present

Bachelor of Science in Computer Science

Seminar work: [The Evolution of the C++ Memory Model](#)

Thesis: [An Environment for Continuous Integration and Software Testing for sys-sage](#)

SKILLS

C++20

Rust

Java

Git, GitHub

WebGPU, Vulkan, Metal, OpenGL

Qt 6

Familiar: Swift, Android, Haskell, Kotlin, JavaScript, and HTML/CSS

Languages: German, Czech (bilingual), and English C1

Personal Interests: Realtime rendering, mathematics, Geometric Algebra, programming close to hardware, being productive

PERSONAL PROJECTS

4D Geometry Renderer

Implementing a Flutter App rendering a spatial slice of a draggable 4-D geometry. Features interactive rotation on the X-W plane, the resulting 3-D slice is computed and rendered in real time. [Source code](#)

JavaScript mini IDE

Implementing an Android App featuring a JavaScript editor with syntax highlighting. The code is parsed in C++, the result passed back through the JNI. Features a built-in file explorer to persistently store scripts. [Source code](#)