# Jim Eckerlein

# Software Engineer

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## **EXPERIENCE**

## **GPU Software Engineer, UX3D**

January 2019 — Present

Development on <u>Gestaltor</u>, the company's product, using Qt and C++. Engine and middleware development in C++, Vulkan, and OpenGL

Contribution to the <u>official Khronos gITF Sample Viewer</u> and adding support for Draco mesh compression to the <u>official Blender gITF Importer and Exporter</u>

#### Software Developer, mbs Electronic Systems

June 2017 — December 2018

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

Reference

#### Trainee, ESR Labs

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

# **SKILLS**

C++17 Java Git, GitHub Vulkan, OpenGL Qt 5

**Familiar**: Android, Rust, Haskell, Kotlin, JavaScript, and HTML/CSS

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

Personal Interests: Realtime rendering, continuous mathematics, linear and geometric algebra, programming rather close to hardware, being productive, watching Pixar movies, and reading

## 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 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