

Overview

Offering: a *software engineer* with the burning desire to contribute in interesting projects which require engineering of *efficient software solutions*.

Goals: seeking positions which would allow the applicant to gain *industry experience*, preferably in *systems programming* and *computer graphics*.

Education

Linköping University (2016–2019): soon to receive a *M.Sc. in Computer Science*, within the *Computer Graphics and Machine Learning* fields.

Technical University of Munich (VT2018) scholarship for exchange study during a semester, focused on *computer graphics with deep learning*.

Linköping University (2013–2016): fulfilled requirements for *B.Sc. in Computer Engineering*, within the *Software Development* specialization.

Experience

ICT Engineer – Ericsson Linköping (2017) developed tools for automatically inserting cable information in the Linköping GIC using Python.

Student Researcher – Ericsson (2016): my bachelor's thesis is based on the problems solved at Ericsson R&D. I developed tools for *gathering code coverage* on a *performance-sensitive system*, and effective ways to *analyze test similarity* with the *Jaccard index*. One is able to *cluster* similar test cases, and do *test selection* in the CI system.

Free/Open-Source Software Development: contributions to the *glfw* library, providing easy cross-platform *window, input, context handling*, for *OpenGL / Vulkan* applications. *X11* back-end.

Side Projects: the *monte carlo raytracer mcrt*, the *deep sea Gerstner wave simulator osgw*, also the *curl-noise procedural fluid flow kernel cnpf*, a small *chip-8 emulator* and a *LZ78/AAC codec*. I also made a 3-D puzzle game called *NQSokoban*. All of these, and more, I distribute under a MIT license on *github*, and in my personal website.

Independent Game Development: involved in many *game jams* throughout the years, where I've design and developed many *game prototypes* by using C++ with *OpenGL* or *Haxe* w/ *HaxePunk*.

Languages

English: certificate proves *professional fluency*.

Swedish: *bilingual fluency* (double nationality).

Portuguese (Brazilian): my *native language*.

Spanish: *intermediate proficiency* with reading.

German & Japanese: *elementary* knowledge.

Proficiencies

Software Development: knowledgeable in the *ISO C17/C++17* languages, among several others, and their *development toolchains* (e.g. *gcc, gdb*). Proficient in common *software engineering* tasks.

Embedded Software Development: able to *design and develop software* for *microcontrollers* using *ISO C17*, or common *assembly* languages. Also *synthesis of circuits* using *IEEE VHDL 2008*.

Computer Graphics and Image Synthesis: using the *OpenGL* API. Knowledgeable in common *techniques for real-time rendering, shader/kernel programming* in *GLSL/CUDA/OpenCL*, and others. A bit of know-how on *geometric modeling, fluid simulation, procedural texturing and ray tracing*. Also knows *machine learning* techniques for CG.

Computer Architecture & OS: understands the effects of *hardware & abstraction in software*; programming *multicore and graphics processors*. Good knowledge of inner workings in *GNU/Linux*.

Theoretical Computer Science: the concept of the *design and analysis of algorithms* (briefly), *overview of cryptography, compiler construction, lossy data compression and artificial intelligence*.

Certificates

Cambridge ESOL CAE C1: *English fluency*.

Trafikverket Drivers License: for small cars.

Cisco CCNA Discovery: for small-scale nets.

Distinctions

Yrkes-SM in Web Development: 3rd place.

ITG-Award Winner in Programming: 1st.

Relevant

LinkedIn: for additional information about me:
→ <https://linkedin.com/in/eriksvjansson>.

GitHub: projects & contributions you'll find in:
→ <https://github.com/caffeineviking>, too.

References: given upon request, please contact.