

Eric Arnebäck – Curriculum Vitae

Date of Birth 29 November 1993

Email arnebackeric@gmail.com
Website erkaman.github.io

About: Eric Arnebäck is a **Swedish** developer with a deep passion for real-time computer graphics. He spends much of his spare time working on graphics-related side projects, and studying the latest research papers about computer graphics.

Education

2012-2015 BSc in Information Technology, Chalmers University of Technology

2015-2017 MSc in Computer Science, Chalmers University of Technology

Employment History

Sep 2016 - Fraunhofer-Chalmers Centre for Industrial Mathematics, *Gothenburg*
Mar 2017 *Contracted Student*

Worked as a contracted student a couple of days every week while studying at the university. I explored and implemented approaches to rendering particle simulations with a large number of particles at interactive frame rates. I also explored and implemented procedural generation of meshes, where the meshes are to be used in the visualization of particle simulations.

Technologies Used: GLSL, OpenGL, C++, RenderDoc.

Jun 2017 - Fraunhofer-Chalmers Centre for Industrial Mathematics, *Gothenburg*
Jun 2018 *Development Engineer*

Responsible for developing and adding new features to the graphics engine of the software Industrial Path Solutions. I prototyped using Vulkan for rendering CAD data. I prototyped using Screen-Space Reflections for automotive rendering. Implemented a GPU-accelerated Path Tracer using OptiX, and integrated my solution into a simulations software used in the automotive industry.

Technologies Used: GLSL, OpenGL, C++, Vulkan, RenderDoc, OptiX

Jun 2018 - Playdead, *Copenhagen*
Jan 2019 *Graphics Programmer*

Was responsible for developing Rendering Technology for the games that are being developed in the studio

Technologies Used: Unity, Direct3D, RenderDoc

Feb 2019 - Standard Cyborg, *San Francisco*
Independent Consultant

Working with Computer Vision and Geometry Processing, as a remote consultant.

Skills

- Advanced knowledge of **Graphics Programming** with **OpenGL**, **WebGL**, **Direct3D** and **Unity**.
- Advanced knowledge of **Object-Oriented Development**, mainly using **C++** and **Java**.
- Advanced knowledge of **Geometry Processing**, having implemented techniques like **Mesh Deformation** and **Mesh Parameterization**.
- Intermediate knowledge of **Performance Optimization** using **Multithreading**, **SIMD**, and performance profiling tools such as **Nvidia Nsight**.
- Intermediate knowledge of **GPGPU Programming** with **CUDA** and **OpenGL**.
- Intermediate knowledge of **front-end web development** using **Javascript**, **HTML** and **CSS**.