

# CURRICULUM VITAE

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## PROFILE

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I'm an engineer with a foundation in algorithms and additional studies in computer graphics and GPU programming who wants to delve further into the video game industry and C++. Video games is a favorite hobby of mine, a journey which has mainly consisted of CS 1.6, DOTA 2 and competitive TF2. At the moment I enjoy playing Rocket League, Apex Legends and coop games with my friends. One of my biggest strengths is my curious personality, which motivates me to dig deep into problems in order to fully understand and learn from them. Everything from the architectural level to the small details interests me. I also have a passion for C++ and love to learn more and dig deeper into the language. I greatly enjoy mentoring and teaching others and have successfully led both thesis students and teams of interns. I also enjoy tinkering with different graphics projects at home, some of which can be seen on my homepage!

## Work Experience

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### 2021 - Developer | AFRY AB | Malmö

Developer in the Embedded Systems team in Malmö. Mostly develop in C/C++ for embedded Linux environments. Examples of tasks include creating an application for handling a docker installation on a camera, and being a leading figure in modernizing the C++ used in our codebase.

### 2014 - 2021 Developer | Sectra AB | Linköping

Developer in an imaging and visualization team for medical imaging. I mainly worked in C# and C++, developing visualization tools for radiologists and universities. We were also responsible for profiling and optimizing the performance and stability of the imaging workflow. Major projects include developing the NM Fusion tool, which produces renderings of two separate volumes and fuses the images according to user input. My work included both frontend and backend, database included. An example of when I worked on all parts was when I designed our solution for creating and viewing lectures for education purposes in our product. I was also lead on the implementation of this feature. One of my biggest accomplishments was profiling, optimizing and multithreading our image preloader. I also worked on improving our 3D rendering engine. Mentorship has also been one of my tasks, such as leading teams of summer interns as well as thesis students and new employees.

**2013**

## **Developer | Saab Dynamics AB | Linköping**

A summer job where I multithreaded and implemented a ray tracer for underwater acoustic simulation in CUDA. I learned a lot about GPGPU programming and designing for SIMD architecture, which I used later on in my thesis.

## **Education**

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**2008 - 2015**

## **Master in Computer Science | Linköping University**

My degree is MSc in Computer Science with a specialization in Programming and Algorithms. I took additional courses in Computer Graphics as well as GPU-programming and graduated with an average grade of 4.5. I also got into competitive programming and was selected to travel with a team to NWERC in Bremen to compete for Linköping University.

My master thesis was done at Syntronic AB and had the title "Using OpenCL to Implement Median Filtering and RSA Algorithms: Two GPGPU Application Case Studies". My work included researching, implementing and optimizing Median Filtering and RSA algorithms on the GPU.

**2004 - 2007**

## **IT-Gymnasiet | Skövde**

IT focused high-school degree with focus on programming- and network studies. I was awarded with a scholarship for the best performance over 3 years.

## **Language skills**

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<b>Swedish</b>	Native language
<b>English</b>	Fluent

## **Programming languages**

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### **Good knowledge in**

C#, C++, C

### **Basic knowledge in**

Java, Python, SQL, JavaScript, GLSL, Powershell, Bash

## **Miscellaneous**

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Experience in CUDA, OpenCL and OpenGL

Experience in Microsoft Visual Studio in a business environment

Experience in SVN, TFS, Mercurial and Git

Experience in Docker, Yocto, CMake

Selected for Scania Student Intro

Driver's license

**Grades and references are available upon request.**