Filip Karlsson

Game Programmer

Myresjö, Vetlanda, Sweden
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LinkedIn, Portfolio, GitHub

Skills

GitHub

Unity

C#

C++

Agile and Scrum

Game Development

Lua

Artificial Intelligence

Machine Learning

HLSL

DirectX 11

Languages

Swedish

English

Profile

Passionate game programmer graduate with experience working with C++ and DirectX 11. Committed to gain experience and creating solutions. Worked on two games projects with 5-10 people in school where the team and independent work were both important and fun. I've also worked on a third person shooter in Unity for a game jam and a vampire survivors-like game in Godot.

Employment History

Personal Assistant, FMF Assistans, Ekenässjön

July 2020 — Present

I work part-time at FMF as a Personal Assistant to one individual. I help the individual with cooking food, cleaning, hygiene, and other important tasks that they can't handle on their own. At my individual's home, the environment is changed to their needs so they feel the most comfortable in their own home. Documenting is also part of the job to make it easier for new assistants and keeping everyone up to date.

Summer Job, Plannja Steinwalls, Landsbro

July 2015 — August 2019

This was my first summer job and before I was 18 I mostly sat in a room shining advertising sheet metal. Although simple it was a good first experience job. When I turned 18 I was placed in the producing area and worked at different machines. Bending diverse sheet metal in different machines and also packing components for clients.

Education

Bachelor of Computer Science, Game Programming, Blekinge Institute of Technology, Karlskrona

August 2017 — 2021

Bachelor's Thesis in Computer Science 2020

I and one other student made a thesis about machine learning using ML-Agents in Unity. The title is "*Comparison of Two Different Methods of Generating Physics-Based Character Animation using Reinforcement Learning*" and can be found on Diva. We compared generating animation with motion imitation and one without.

Large Game Development Project with Agile Methods 2019-2020

A big game project I and 10 others worked on during my studies at BTH for 6 months, called Oil Spillage. The game engine was made with DirectX and Bullet Physics. Some work I did was a particle system mainly on the GPU using compute shaders, shadow mapping, a simple mission system and, the UI for the missions. Repository: https://github.com/Xemrion/StortSpelProjektGrupp2

Small Game Project for Game Programming 2019

My first team game project spanning 3 months with 5 other students. Our task was to create a game with the graphics API DirectX without any prebuilt engine. We created a fighting game called Woodland Beatdown where you play as an animal and fight each other up to 4 players locally. I worked on the engine and created shadows using shadow mapping, glow, deferred rendering with volume lights. Repository: https://github.com/xfac11/LitetSpel

Technique program, Information and media technique, Njudungsgymnasiet, Vetlanda

August 2014 — June 2017

Courses

Large Game Development Project with Agile Methods, Blekinge Institute of Technology

Small Game Project for Game Programming, Blekinge Institute of Technology

3D Programming, Blekinge Institute of Technology

Initial Programming in C++, Blekinge Institute of Technology

Object-oriented Programming, Blekinge Institute of Technology

Algorithms and Data Structures, Blekinge Institute of Technology

Game Artificial Intelligence

Usability and Interaction Design

Scripting and Other Languages

Basics in Game Development

Applied Real-time Physics

Bachelor’s Thesis in Computer Science

Linear Algebra

Software Design

Performance Optimization

Computer Networking for Game Development

Research Methodology in Game and Software Engineering

Research Orientation in Game and Software Engineering

Operating Systems

Discrete Mathematics for Software Technology