

LUCA ALEXANDRU SAS

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github.com/SasLuca

Leeds, United Kingdom

EDUCATION

University of Leeds - BSc Computer Science

Started September 2017 - Graduating July 2020

EXPERIENCE

Open Source Developer @ github.com/SasLuca

October 2019 - Present

I developed rayfork, a C99, platform-independent game-dev library with full control over allocations, forked from raylib by refactoring over 50000 lines of code and 300 functions and improving performance.

I also developed a C99 library for parsing C language code.

Open Source Contributor @ raylib

October 2019 - Present

I fixed low level bugs such as memory leaks, platform audio issues, buffer overflows and helped with improvements such as the removal of global variables. I also work on iOS support.

Contract Software Engineer @ Collider Visuals

November 2017 - March 2018

I ported an Unreal Engine 4 VR application created for Bottega Veneta, Alexander McQueen and Procter & Gamble to iOS.

I worked on a VR Car Configurator for Mercedes Benz, developing the architecture, companion mobile app in Kotlin & voice controls with C#.

Software Engineer @ Colegiul Pacientilor

October 2015 - October 2016

Volunteered to developed a mobile app for the largest patients rights organization in Romania, using Kotlin and a C# Azure backend. It won multiple awards at InfoEducatie and Grepit.

Graphic Designer @ Colegiul Pacientilor

October 2015 - Present

I created the logo and all other graphical materials using Adobe Illustrator for "Colegiul Pacientilor".

Other Open Source Contributions:

- PAR Headers
- I improved the custom allocator support.
- STB Image
- I fixed issues with custom allocators in the gif API.
- MSVC STL
- I provided fixes to issues in generic C++ code.
- raygui
- I made the library C++ compatible.
- libco
- I made a single header version of libco, a library for coroutines in C99.

SKILLS

C++ 20, C 99, Java, Kotlin

Python, C#, NodeJS

Dart, Batch, Zig, Swift

PROJECTS

Rayfork

Single header, C99, cross platform, game dev library with full control over allocations.

LSCP - A library for parsing C

A single header C99 library for parsing the C programming language according to the ISO standard.

UK Shelters and Food Banks API

A python API that gathers information from multiple sources on shelters and food banks in the UK.

MDCLX - VR Bike riding game

A university team project where we made a VR bike riding game in Unreal Engine 4 with a companion mobile app. I made the server-client architecture and mobile app.

The Cell Phone Game

A mobile storytelling game initially made using Kotlin and LibGDX and rewritten in C99 using rayfork.

ACTIVITIES

University of Leeds Computer Society

I was Vice-President and Chair from 2017 to 2019 and organized events such as Google Hash Code, guest talks and parties and I teach students how to make games in C at the Game Dev Club.

InfoEducatie - Judge

I have been a judge at the National Olympiad "InfoEducatie" in Romania since 2018, judging over 40 projects every year and mentoring and providing feedback to all participants.

Talks and articles

I wrote articles on topics such as low level memory management and library design. I gave one of the most watched YouTube talks from ACCU2019 and I was accepted as a speaker at other conferences such as emBO++. I also stream coding on Twitch.

AWARDS

2019 - University of Leeds BT Hackathon	2nd
2019 - Expedia Hackathon	3rd
2018 - University of Leeds Hackathon	1st
2018 - Google HashCode @ University of Leeds	1st
2018 - London Sky Hackathon	1st
2017 - Google Dev Group Hackathon	1st
2017 - InfoEducatie National Contest	2nd
2017 - Grepit 10 - Games	1st
2017 - Global Game Jam Romania	3rd
2016 - GrepIT 9 - Software	1st
2016 - InfoEducatie National Contest	1st