
SUMMARY

Software engineer and computer graphics researcher who is mainly interested in real-time computer graphics, ray/path tracing and digital geometry processing. Aside from them, he is a reverse-engineering hobbyist. He prefers to stay close to the hardware.

EDUCATION**Middle East Technical University**

Ankara, Turkey

*MSc in Multimedia Informatics; GPA: 3.61**Oct. 2017 – Sep. 2020 (Expected)**Thesis: 3D Indoor Scene Segmentation Using Ensemble Clustering**Supervisor: Assoc. Prof. Yusuf Sahillioğlu***Hacettepe University**

Ankara, Turkey

*BSc in Computer Engineering; GPA: 3.42**Sep. 2013 – June 2017*

EXPERIENCE**Research Intern, Hacettepe University**

Ankara, Turkey

Aug. 2016 – Sep. 2016

Worked on a research project about discovering the topology of a network of IoT devices with Assoc. Prof. Mehmet Köseoğlu. Implemented a wireless network scanner using *Wireless Tools for Linux* and collected data via Intel Edison boards. Besides, the same application is ported to Android to allow mobile phones to help data collection phase.

Technologies Used: *Android NDK and SDK, C, Java, MATLAB*

Game Developer Intern, Panteon Game Technologies

Ankara, Turkey

June 2015 – Oct. 2015

Worked on three different mobile game projects. One of them, *MoBu*, is published during my internship and I have implemented endless gameplay mode for it.

Technologies Used: *C#, Git, Jenkins CI, Unity 3D*

SELECTED PAST PROJECTS

azimuth: A CPU based ray/path tracer.

hoppy: A simple 2D game written in C from scratch for aarch64 based Android devices.

Project Vikings: A 3D racing game for which I implemented AI behaviour and car mechanics.

Thinkies: A simple casual game made during Global Game Jam 2015.

TECHNICAL SKILLS

Programming Languages: C, C++11, C#, MATLAB, Java, x86 Assembly

Graphics APIs: OpenGL (3.x), OpenGL ES, Direct3D (10 & 11)

Shading Languages: GLSL, ShaderLab, HLSL

Parallel Computing: CUDA

Graphics Debuggers: PIX for Windows, Intel GPA, NVIDIA NSight

Game Engines: Unity3D, Cocos2d

APIs/Libs: Win32 API, Eigen, FBX SDK, Intel SSE, OpenGL ES, pthreads

Scripting: Bash, Batch

Version Control: Git

IDEs/Text Editors: Notepad++, Vim, Microsoft Visual Studio, Android Studio, Eclipse

Compilers: MSVC++, gcc/g++

Other Programming Tools: GDB, Valgrind, dotPeek, make

Operating Systems: MS-DOS 6.22, Microsoft Windows (95, 98, XP, Vista, 7, 8), Various Linux Distributions (incl. CentOS, Kali, Lubuntu, Tails, Ubuntu)

3D Graphics Tools: Blender, MagicaVoxel, MeshLab

Raster Graphics Tools: Adobe Photoshop, GIMP

Other: CSS, HTML, LaTeX

Once Upon A Time: MongoDB, MySQL, PHP, Prolog, SQL

LANGUAGES

Turkish (*native*)

English (*fluent*)

German (*basics*)