

Jad-Nicolas Khoury



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I'm a hardworking and adaptable person, and a good team member. I'm really passionate about Rendering, VR, and Computer Graphics, and am currently looking for a 6 months internship for aug-sept 2017. Please do not hesitate to visit my website for more detailed informations !

Education

Master Degree in Computer Science EPFL

09/2016 - Present

Lausanne, Switzerland

- Virtual Reality
- 3D Geometry Processing
- Adv. Computer Graphics
- Computer Vision

Bachelor Degree in Computer Science EPFL

09/2012 - 07/2016

Lausanne, Switzerland

- Computer Graphics
- Software Engineering
- Computer Vision
- Adv. Theoretical C. Sc.
- Functional and Reactive Programming
- Analysis I, II and III, Linear Algebra

High School

Lycée Général Aux Lazaristes

09/2009 - 06/2012

Lyon, France

- Scientific Branch
- Engineering Orientation
- Mathematics Specialization

Experience and Projects

Web Gallery for Goal-Based Caustics LGG lab - EPFL, Rayform

09/2016 - Present

- ThreeJS client side to render a 3D environment
- Implemented an OpenGL RayTracer optimised for caustics computation
- Currently working on deporting the RayTracer on an AWS instance and streaming the caustic texture to the client

Procedural Planet Rendering Project Introduction to Computer Graphics - EPFL

03/2016 - 06/2016

Won Best Course Project 2016

- Implementation in C++ and OpenGL 4.x
- Features include infinite heightmap computation, distance fog, water reflection and refraction, adaptive texturing, dynamic tessellation, displacement optimisation through cycling buffers

Human Perception of Guided Interaction Immersive Interaction Group - EPFL

02/2015 - 06/2014

- Implemented an ISO 92141-9 multidirectional reaching task experiment
- Used PhaseSpace motion capture equipment and server, Oculus Rift, Unity Game Engine (4.x) and C# Scripting

Languages, Tools and APIs

| | | | | | |
|---------------------------------------|---|---|---|---|---|
| C++ | ● | ● | ● | ● | ● |
| Java | ● | ● | ● | ● | ○ |
| Scala | ● | ● | ● | ○ | ○ |
| MatLab | ● | ● | ● | ● | ● |
| Shading Languages (OpenGL) | ● | ● | ● | ● | ● |
| Swift , Objective-C, XCode IDE | ● | ● | ● | ○ | ○ |
| ThreeJS | ● | ● | ● | ● | ○ |
| Git | ● | ● | ● | ● | ● |
| Unity Game Engine (with C# Scripting) | ● | ● | ● | ○ | ○ |
| UNIX | ● | ● | ● | ● | ○ |

Group Projects

SmartTab Android App project (09/2015 - 12/2015)

- Applied the Agile software development principles in a tight-knit group, established effective collaboration process using GIT version control
- Created the tablature open format and worked on the core functions
- Implemented in Java & Android SDK

Languages

| | | | | | |
|---------|---|---|---|---|---|
| French | ● | ● | ○ | ○ | ○ |
| English | ● | ● | ● | ● | ● |

Interests

Rendering | Animation | Game Engines | Fitness | Music | Nutrition | Video-Games