ORI LAZAR

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A passionate programmer who feels enjoyment and fulfillment from the journey of creating software.

EDUCATION

Newcastle University, United Kingdom *September 2019 - Present*
Masters of Computer Games Engineering. Overall: TBD — Current Average: 96%

University of Southampton, United Kingdom *August 2016 - September 2019*
Bachelors of Computer Science. Overall: First Class

Zman Amiti Bartending School, Israel *January 2016 - April 2016*
International Mixologist Qualification. Overall: 96%

Bedales School, United Kingdom *August 2012 - June 2014*
A-Levels: Maths, Further Maths, Physics, Computer Science.

NOTABLE PROJECTS

An extensive description of all my projects can be found on my website, which is continuously being updated with my new works (orilazar.com).

Undergraduate Dissertation
Paper investigating false alarm removal in real-time CPU based motion detection and neural-net classification algorithms. Solution written in **C++** with **Qt** and the **Caffe** deep-learning framework.

Exalted Graphics Engine
Graphics engine built from the ground up with API-agnostic rendering, written in **C++**.

Vulkan Pipeline Assistant
Tool which aims to be a solution for the problem of having to write hard-coded data for the generation of different graphics pipelines when using the Vulkan API. Written in **C++** with **Qt** and **Vulkan**.

Game Technologies Goose Game
AI, Physics and Networking solutions to produce a playable game with all those components, written in **C++**.

Elysium Puzzle Simulator
Combinatorial strategy simulator for variations of the 15-Puzzle problem, written in **C++**.

Runway Re-declaration Tool
Developed as a team project using **agile methodologies**. Tool analyzes airport runway landing scenarios with respect to a set of safety requirements. My roles were **scrum leader** and **lead programmer**. Written in **Java Swing**.

Mapex Programming Language
A programming language developed in Haskell, developed with the goal of being able to solve any conjunctive query. Written in **Haskell**.

Industrial 6-DOF Robotic Arm Simulator
Built from scratch, a simulation of a 6-DOF industrial robotic arm, including kinematic and inverse kinematic solvers. Written in **Matlab**.

TECHNICAL SKILLS

Programming Languages:	C++, GLSL, C#, Java, C, Lua, Python, Haskell, Matlab, HTML, CSS, Javascript
Tools:	Visual Studio, Latex, Git, Premake, NSight, Qt Creator, Eclipse, IntelliJ, Photoshop
Frameworks and Engines:	Unity, Java-Swing, Qt, Unreal-Engine 4
Libraries:	OpenCV, OpenIMAJ, OpenGL, GLM, ImGui, Assimp, Vulkan ENet

WORK EXPERIENCE

DLC LTD, Israel **2017 - 2018**
Computer Vision Developer

· **2018:** Worked on the integration and implementation of deep neural nets to produce classification of a dynamic set of entities in dynamic environments, including windy environments which had to be tracked during dynamic times of the day. Involved **Tensorflow, Qt, python and C++**.

2017: Developed algorithms which performed real-time motion detection in both new and existing security system and tasked with implementing these solutions into client's Qt based applications.

Cote D'azur Cocktail Bar, Cyprus **2016**
Bartender

· Head mixologist for a subsection of the bar. Involved managing a team of three to produce high quality cocktails. I was also involved in analyzing existing solutions in order to produce improved staff behavioural patterns combined with timed event executions, which successfully resulted in greater earnings.

PERSONAL NOTES

When possible I enjoy travelling to unique destinations, documenting my experiences through amateur photography. I spend my evenings with my dogs and partner, usually visiting local nature zones.

Can fluently communicate in **Hebrew** and **English**.

Enjoy **Snowboarding**, **Surfing**, **Basketball** and playing **Video Games**.

REFERENCES

References available upon request. Please contact me via e-mail or phone.