

# ORI LAZAR

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Passionate about developing tools and graphics engines to produce mesmerizing simulations using C++.  
I am eager to work in a team environment and share my experiences and knowledge with others.

## EDUCATION

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<b>Newcastle University, United Kingdom</b> Masters of Computer Games Engineering.	<i>September 2019 - Present</i> Overall: TBD — Current Traj: First Class
<b>University of Southampton, United Kingdom</b> Bachelors of Computer Science.	<i>August 2016 - September 2019</i> Overall: First Class
<b>Zman Amiti Bartending School, Israel</b> International Mixologist Qualification.	<i>January 2016 - April 2016</i> Overall: Top of the Class: 96%
<b>Bedales School, United Kingdom</b> A-Levels: Maths, Further Maths, Physics, Computer Science.	<i>August 2012 - June 2014</i>

## PROJECTS

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### Exalted Engine

A graphics engine written in C++ built from the ground up with API-agnostic rendering. This project is not currently public, but may be viewed upon request.

### Dissertation

A research into false alarms removal in real-time motion detection and classification algorithms at the CPU stage, including an integrated solution which became viable for change detection algorithms. The result of this research was a system with the capabilities of performing motion detection in dynamically lit, windy and noise filled environments, at real-time speeds, on the CPU.

### Software Engineering Group Project

I was the **scrum leader** and **lead programmer** for a team of 7, this meant being in charge of scheduling and assigning proactive workload between team members. Furthermore I had the opportunity to demonstrate the analysis of our progress on a bi-weekly basis to a marking committee, this included written and verbal reports.

### Mapex Query Language

A programming language developed using Haskell which has the capabilities to solve any conjunctive query problem. A link to the documentation can be found at [orilazar.com](http://orilazar.com).

More projects can be found on my github, [github.com/Kney-Delach](http://github.com/Kney-Delach).

## TECHNICAL SKILLS

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<b>Programming Languages:</b>	C++ (4 years), GLSL (1 year), Lua (1 year), Haskell (2 years), Java (7 years)
<b>Software Development Tools:</b>	Microsoft Visual Studio, NVIDIA NSight, Unity, Unreal Engine, Git, Premake, Latex, Doxygen
<b>API and Systems:</b>	ImGui, OpenGL 3.3, Assimp, Spdlog, QT, Tensorflow, Caffe
<b>Production Tools:</b>	Github, Slack, Virtual Box

## GAMES

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Playable links of the following games can be found at [www.orilazar.com](http://www.orilazar.com)

### Mirage

A 2D spatial reasoning platformer I designed and developed with the aims of demonstrating a single core dynamic through fluid tutorialisation.

### Musical Pipes

This game was created with the aim to showcase real-time signal analysis based procedural level generation. It also showcases a fun extension of generic survival pipe games.

### Seven Ravens

A top-down game used to showcase a parallel story-telling engine.

### Splash

This game was created with the aim to explore mobile game development and optimization requirements to meet mobile platform needs.

## WORK EXPERIENCE

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### DLC LTD, Israel

June - September 2017 & June - September 2018

*Computer Vision Developer*

- **2018:** Worked on the integration and implementation of deep neural nets to produce effective classification of a dynamic range of entities in dynamically changing environments, including windy outdoor environments which had to be tracked during day and night.

**2017:** Developed algorithms to improve real-time motion detection capabilities of existing security systems, and integrated additional client-side capabilities using QT.

### Cote D'azur Cocktail Bar, Cyprus

June - September 2016

*Bartender*

- Head mixologist for a subsection of the bar. Involved managing a team of three to produce high quality cocktails. Also involved interacting within a high volume network of communication between a large staff team and customer base, whilst maintaining high and consistent standards of service.

## ACHIEVEMENTS

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**Outstanding Game Award:** Highest quality concept game produced by a student during the games design and development module. University of Southampton, 2019.

**Top of the Class:** Was awarded for graduating with the highest score of my class at the Zman Amiti International Bartending School in Tel-Aviv, Israel.

## PERSONAL NOTES

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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**, **English**, and intermediately in **Russian**.

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

## REFERENCES

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