

## Skills

### Operating Systems



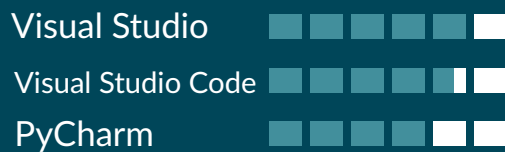
### Programming Languages



### Programming Libraries



### IDE



### Game Engine



### 3D Modelling Software



### Others



## Languages

Italian *Native Language*

English *IELTS 7.0*

# Rossella Scarcia



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## Me

I've always been passionate about science and technology and this has led me to choose Computer Engineering as a course of study. Later, thanks to various classes in my Master's Degree, I've developed an interest in new technologies such as **Virtual** and **Augmented Reality**.

## Experience

### Master Thesis

nov 2019 - oct 2020

*Development of a digital mannequin for aerospace ergonomic design and a training system in VR.*  
(Thales Alenia Space Italia)

The thesis consists of two parts: in the first part was developed a tool that allows you to automatically create 3D models representing astronauts. The plug-in was developed in **Python** for the Make Human software: this tool allows the user to create mannequins representing the six percentile categories present in NASA documents. For the second part of the thesis, a **VR training system** was developed using the **Unreal Engine 4**. Has been designed a virtual assistant with the appearance of the CIMON robot of the ISS and thanks to the **small-talk** component of a **commercial AI** it is able to teach the user how to move within a simulation in VR and interact with the objects present or have a simple conversation with his interlocutor.

Company Website: <https://www.thalesgroup.com>

## Projects

### OpenCV Assistant

may 2019 - jul 2019

Development of a simple application for face recognition. Integrated with a vocal assistant, the AI answers only if the user is directly watching the webcam and both eyes are detected. OpenCV algorithms were used to implement face recognition features and Google Assistant was chosen as voice assistant.

Project Link: [https://github.com/RScarcia/OpenCV\\_Assistant](https://github.com/RScarcia/OpenCV_Assistant)

### LAN File Sharing

oct 2018 - jun 2019

Development and design of a software application to share files or folders between two or more computers in the same LAN network.

Project Link: <https://github.com/GiMoody/PDSPProject>

## Soft Skills

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### Teamwork and Project Management

Developed during the execution  
of university projects

## Organization

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**TdF Mediterranea** 2013 - 2015

Educator during *Treno della Memoria*  
project.

Site: <http://tdfmediterranea.org>

### Tree of Life - Ancient Guild Unity3D Game

oct 2018 - feb 2019

Development of an interactive application using **Unity3D** engine.  
Blender was also used to model some of the game's objects.

Project Link: <https://r8x-games.itch.io/tree-of-life>

### The Wizard Short Animation for proof of concept game in Unity3D

mar 2018 - jul 2019

Short animated video made with **Blender** to advertise a video game.  
The team used the **Unity3D** engine to develop the proof of  
concept of the game.

Youtube Video: [https://youtu.be/VBk6zObF\\_20](https://youtu.be/VBk6zObF_20)

### KNX Scheduler

mar 2016 - dec 2016

Development of a software application to manage various scenarios  
in a home automation system compliant with the **KNX Standard**.  
In particular the user can create timed or one-shot scenarios and  
can interact with every single device in the environment, changing  
its status.

## Education

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### Master's Degree in Computer Engineering (Politecnico di Torino)

mar 2017 - oct 2020

- Introduction to computer graphics theory and programming, computer animation theory and virtual reality application.
- Introduction to image capture, processing, recognition using computer vision techniques.
- Introduction of computer security and elaboration system architecture.
- Advanced database management system, system programming (multithreading and synchronization), operating system functionality (ex. system calls).

### Bachelor's Degree in ICT Engineering (Università del Salento)

sep 2012 - jan 2017

Introduction to:

- Mathematics, Physics and Algebra
- Signal Processing and Communication
- Network Protocols and Structures
- OOP (Java) and Operating Systems (Unix)