## **FEDERICO SALDARINI**

Computer Scientist | Software Engineer



Oxfede.io



fede.saldarini@gmail.com



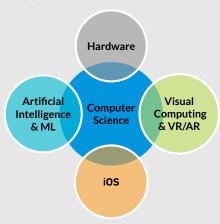
/in/federicosaldarini



saldavonschwartz

# Skills-

### **Areas**



### Languages

Python • C++ • Obj-C • C# • Swift

# Projects -

#### NNKit

A Python framework for implementing dynamic neural networks.

#### **DQN**

An implementation of Deep Q-Network used in solving reinforcement learning environments in OpenAI Gym.

## Digits ==

A neural network classifier trained in Python and deployed to iOS via Obj-C++ and OpenCV.

#### **GPUKit**

AC++ framework for OpenGL rendering.

#### VRTeleport =

A C++ plugin for virtual reality teleportation in Unreal Engine.

#### **ABOUT**

2009

Present

I am a computer scientist with interests in visual computing, artificial intelligence and interfacing with the physical world and I enjoy working on projects where these converge.

#### **EDUCATION**

	2018	Audited Courses CS188 Artificial Intelligence CS189 Machine Learning CS184 Computer Graphics CS194 Computational Photogr	University of California, Berkeley. Berkeley, CA.	
	2011	B.S. Computer Science	Portland State University. Portland, OR.	

## **EXPERIENCE: VR, AR, AI, GRAPHICS AND HARDWARE**

**Music Synthesis** 

03/17	Contract Software Engineer	

**Freelance Software Engineer and Consultant** 

OpenGL, C++
R&D of OpenGL ES voxel engine for Raspberry Pi, as an alternative to
Minecraft Pi Edition.

02/17 Contract Software Engineer RED Patterns

Unreal Engine, Unity, HTC Vive

R&D of a room-scale VR experience, including depth-capturing of live actors and environments.

Berklee Collge of Music. Boston, MA.

Piper

11/16 Contract Software Engineer Endless Riff

Unity, Oculus Riff, Google Cardboard

Character rigging and optimization of assets and precomputed lighting according to capabilities of desktop vs mobile VR hardware.

05/16 Contract Software Engineer Boon

Unreal Engine, Unity, Samsung GearVR, Google Cardboard

Prototyping of different VR + 360 film viewers and interactive environments for different mobile platforms.

02/16 Contract Software Engineer Magic Instruments

iOS, Bluetooth LE

Implementating a BLE protocol and music engine for iOS devices to interact with a custom electronic guitar.

08/15 Contract Software Engineer Wiggle Planet

iOS, C++, Vuforia

Auditing and bug-fixing of C++ / Vuforia code in an iOS AR application.

02/14 Full-Time Software Engineer

iOS, C++, Unity, Bluetooth LE

Implementing several features of Anki Drive for iOS. R&D on interfacing Unity with custom C++ AI-planner.

### OTHER IOS EXPERIENCE: FULL-TIME & CONTRACT | 2012-2017

Shyp • Shopular • Live Nation • Interview Cake • Basic Space • Learnist • Nextive

#### **PUBLICATIONS**

11/10 The Audio Programming Book

MIT Press

Waveshaping: from Csound to Cocoa. DVD: Ch. 34.