

FEDERICO SALDARINI

Computer Scientist | Software Engineer



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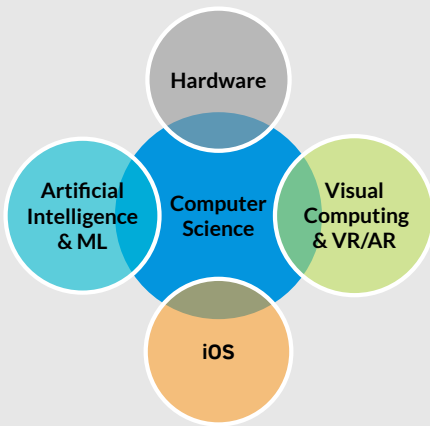
/in/federicosaldarini



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

AC++ plugin for virtual reality teleportation in Unreal Engine.

ABOUT

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

EDUCATION

2018	Audited Courses CS188 Artificial Intelligence CS189 Machine Learning CS184 Computer Graphics CS194 Computational Photography	University of California, Berkeley. Berkeley, CA.
2011	B.S. Computer Science	Portland State University. Portland, OR.
2009	Music Synthesis	Berklee College of Music. Boston, MA.

EXPERIENCE: VR, AR, AI, GRAPHICS AND HARDWARE

Present	Freelance Software Engineer and Consultant	
03/17	Contract Software Engineer ■ ■ ■ OpenGL, C++ R&D of OpenGL ES voxel engine for Raspberry Pi, as an alternative to Minecraft Pi Edition.	Piper
02/17	Co-Creator / Software Engineer ■ ■ ■ Unreal Engine, Unity, HTC Vive Winner of the Immersion Award at the 45th Festival Du Nouveau Cinéma, Canada. R&D of a room-scale VR experience featuring depth-capturing of live actors and environments.	RED Patterns
11/16	Contract Software Engineer ■ ■ ■ Unity, Oculus Rift, Google Cardboard Character rigging and optimization of assets and precomputed lighting according to capabilities of desktop vs mobile VR hardware.	Endless Riff
05/16	Contract Software Engineer ■ ■ ■ Unreal Engine, Unity, Samsung GearVR, Google Cardboard Prototyping of different VR + 360 film viewers and interactive environments for different mobile platforms.	Boon
02/16	Contract Software Engineer ■ ■ ■ iOS, Bluetooth LE Implementing a BLE protocol and music engine for iOS devices to interact with a custom electronic guitar.	Magic Instruments
08/15	Contract Software Engineer ■ ■ ■ iOS, C++, Vuforia Auditing and bug-fixing of C++ / Vuforia code in an iOS AR application.	Wiggle Planet
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.	Anki

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