

FEDERICO SALDARINI

Computer Scientist | Software Engineer



Oxfede.io



fede.saldarini@gmail.com



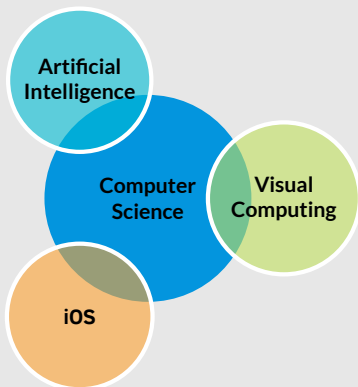
/in/federicosaldarini



saldavonschwartz

Skills

Areas



Languages

Python • C++ • Obj-C • C#

Projects

Jumpy Cube

A physics-based endless scroller game which doubles as a reinforcement learning environment.

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.

rev: 2019-04-22

ABOUT

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

EDUCATION

2018	Audited Courses <ul style="list-style-type: none">• CS188 Artificial Intelligence• CS184 Computer Graphics	University of California, Berkeley. Berkeley, CA. <ul style="list-style-type: none">• CS189 Machine Learning• CS194 Computational Photography
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

01/19	Graphics Engineer (Contract) SDL2, C Porting of a video game (X-Ball, 2001) from SDL1 to SDL2, for OSX and Windows.	Crystal Pier Software
03/17	Graphics Engineer (Contract) OpenGL, C++ R&D of OpenGL ES voxel engine for Raspberry Pi, as an alternative to Minecraft Pi Edition.	Piper
02/17	Co-Creator / VR 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	VR Engineer (Contract) 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	VR Engineer (Contract) Unreal Engine, Unity, Samsung GearVR, Google Cardboard Prototyping of different VR + 360 film viewers and interactive environments for different mobile platforms.	Boon VR
02/16	iOS / Bluetooth Engineer (Contract) iOS, Bluetooth LE Implementing a BLE protocol and music engine for iOS devices to interact with a custom electronic guitar.	Magic Instruments
08/15	AR Engineer (Contract) iOS, C++, Vuforia Auditing and bug-fixing of C++ / Vuforia code in an iOS AR application.	Wiggle Planet
02/14	iOS / Unity Engineer (Full-Time) 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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