

# Federico Saldarini

COMPUTER SCIENTIST | SOFTWARE ENGINEER

## ABOUT

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I'm a computer scientist based in San Francisco, CA. My areas of interest are visual computing, artificial intelligence and interfacing with the physical world and I enjoy working on projects where these converge.

## EDUCATION

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2011                      B.S. COMPUTER SCIENCE  
Portland State University

2009                      MUSIC SYNTHESIS  
Berklee College of Music

## CONTACT

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EMAIL  
fede.saldarini@gmail.com

WEBSITE | PERSONAL PROJECTS  
www.0xfede.io

## EXPERIENCE: VR, AR, GRAPHICS, HARDWARE AND RELATED

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2014 - Present                      Freelance Software Engineer and Consultor

03/17 - 04/17                      PIPER RASPBERRY PI COMPUTER KIT  
Software Engineer - C++, OpenGL (Contract)  
R&D on OpenGL ES voxel engines targeting Raspberry Pi as an alternative to Minecraft Pi Edition.

02/17 - 05/17                      RED PATTERNS  
Software Engineer - Unreal Engine, Unity, HTC Vive - (Contract)  
Commissioned by SAT (Canada). Development of both Unity and Unreal Engine VR experiences based on the independent film with the same name. You can watch the trailer for the Unreal version on my website.

11/16 - 12/16                      ENDLESS RIFF  
Software Engineer - Unity, Oculus Rift, Cardboard (Contract)  
Rigging of characters and optimization of assets and precomputed lighting.

05/16 - 01/17                      BOON  
Software Engineer - Unreal Engine, Unity, GearVR, Cardboard (Contract)  
Prototyping of different VR + 360 film viewers as well as virtual environments with interactive hotspots.

02/16 - 11/16                      MAGIC INSTRUMENTS  
Software Engineer - iOS, Bluetooth LE (Contract)  
Implementation of BLE connectivity and protocol for exchanging information between iOS devices and external electronic guitar, as well as musical score engine for interactive, karaoke-style, performance with said guitar.

08/15 - 09/15                      WIGGLE PLANET  
Software Engineer - iOS, C++, Vuforia (Contract)  
Fixing viewport / transform issues in iOS when interacting with the Vuforia SDK.

02/14 - 10/14                      ANKI  
Software Engineer - iOS, C++, Unity (Full-time)  
Implementing several features of Anki Drive for iOS. R&D on interfacing Unity with custom C++ AI planner. The artifacts of this R&D became the basis for the company's Android release and their switch to Unity.

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## EXPERIENCE: VR, AR, GRAPHICS, HARDWARE AND RELATED

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11/13 - 01/14      BERKLEE COLLEGE OF MUSIC  
Software Engineer - Unity (Contract)  
Integrating Wwise audio engine into a Unity project along with additional logic to make the project suitable for modding by students in a game audio course offered by the college.

## EXPERIENCE: MOBILE

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01/17 - 02/17      MUSIC AFICIONADO  
Software Engineer - iOS (Contract)  
Implementing the core architecture of the iOS app, including considerable interfacing with Javascript.

12/16 - 07/17      INTERVIEW CAKE  
Language Expert - Objective-C, Swift (Contract)  
Establishing the style guides for both languages as well as auditing all code samples and data structure articles which users of the website learn from on a daily basis.

03/16 - 06/16      BASIC SPACE  
Software Engineer - iOS (Contract)  
Auditing existing Swift codebase as well as Implementing several features of the iOS app.

07/15 - 10/15      SHYP  
Software Engineer - iOS (Contract)  
Implementing several features (user-facing and backend) of the User and Courier iOS apps.

02/15 - 05/15      SHOPULAR  
Software Engineer - iOS (Contract)  
Implementing several user-facing, UI and backend aspects of the iOS app.

10/14 - 02/15      LIVE NATION LABS  
Software Engineer - iOS (Contract)  
Implementing features in the Live Nation iOS app, including an A/B testing mechanism to change certain aspects of the app post-appstore submission.

01/13 - 02/14      LEARNIST  
Lead Software Engineer - iOS (Full-time)  
Leading a team of 4 engineers in architecting and implementing v2.x of the iOS app. Pre-screening and interviewing engineer candidates to join the company.

05/12 - 12/12      GLOBANT / NEXTIVE  
Software Engineer - iOS (Full-time)  
Implementing features for the JP Morgan Chase and Go Wallet iOS apps.

08/11 - 05/12      MUST MOBILE  
Lead Software Engineer - iOS (Full-time + Contract)  
Architecting and implementing several iOS apps including a 2d animation engine for Abbot laboratories, based off CoreAnimation.

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## PUBLICATIONS

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11/10

THE AUDIO PROGRAMMING BOOK

MIT Press

"Waveshaping: from Csound to Cocoa". Chapter 34 of the book's DVD.