

# Federico Saldarini

SOFTWARE ENGINEER | COMPUTER SCIENTIST

## ABOUT

---

I'm a software engineer with several years of industry experience, working and living in San Francisco, California. My main areas of interest are computer graphics, artificial intelligence and interfacing with the physical world. I enjoy working on projects where these converge, such as in computer games, VR, AR, consumer robotics and hardware peripherals.

## EDUCATION

---

**2000 - 2003**      **B.S. COMPUTER SCIENCE**  
Portland State University

**1998 - 2000**      **MUSIC SYNTHESIS**  
Berklee College of Music

## CONTACT

---

**EMAIL**  
fede@0xfede.io

**WEBSITE | PERSONAL PROJECTS**  
www.0xfede.io

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

---

**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.

# Federico Saldarini

SOFTWARE ENGINEER | COMPUTER SCIENTIST

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

---

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

---

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.

# Federico Saldarini

SOFTWARE ENGINEER | COMPUTER SCIENTIST

## PUBLICATIONS

---

11/10

**THE AUDIO PROGRAMMING BOOK**

MIT Press

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