Yves Adam Viaud

http://viaud.me/

SUMMARY

Software Engineer with strong affinity for Apple platforms

Education

• Paris Diderot-Paris 7 University	Paris
Master's Degree in Computer Science studying Programming Languages	2018
• EFREI - Marne la Vallée University	Villejuif - Marne la Vallée
Mathematics and Computer Science Bachelor's Degree	2015
• High School Parc de Vilgénis	Massy
Baccalauréat STI, Génie Electronique (High school Diploma)	2010

EXPERIENCE

• Devialet

Mobile Software Engineer

Paris Opéra-Paris Miromesnil October 2018-Present

Legacy iOS application managing Devialet speakers

- **Multiroom**: Developed user interface to Devialet's vision of Multi-room, allowing to create groups composed of multiple solo/stereo speakers and make them play together using any source (AirPlay2, Spotify Connect or even Bluetooth).
- Stereo Support: Added the ability to create and manage stereo pairs of speakers within the application.
- **Migration**: Migrate legacy products to the new Devialet OS from setup Carousel flow using a variety of iOS APIs and frameworks in Swift and Objective-C++ like background downloads, Network Extensions or even low power mode monitoring.
- **System/Group Settings**: Developed *Control Center like* widgets allowing to tweak the settings of the speaker; for instance: latency, preferred network interface, sources auto-switch, product informations and others.
- **Certifications**: Helped pass Spotify and AirPlay2 certifications by complying the app to requested specifications.
- **App management**: Various topics such as dependencies management using Carthage, continuous integration (provisioning profiles/certificates management, TestFlight deployment, test automation) using Fastlane, *ecosystem adaptations* regarding Apple Silicon platforms or new iOS SDKs (connectivity or privacy requirements).

New iOS application managing Bluetooth headsets mainly using CoreBluetooth

- **App management**: Supervised development by establishing guidelines to follow regarding app architecture, features and technologies.
- **Implementation rework**: Reworked global architecture and adopting latest Swift technologies like Swift Packages for modularization or even result builders and property wrappers for cleaner view layout declarations.

• Devialet

Internship

Paris Opéra April 2018 - September 2018

- **Apple Watch app**: Made an Apple Watch app allowing to control common functionalities of Devialet products including playback and volume management. Communicating with the product running a custom embedded Linux OS and hosting a web-server replying with JSON or Server Sent Events responses (C++/libsoup).
- $\circ~$ Other features: Developed other features like user account management, product registration...

Projects

- Jailbreak tweaks (Cydia): Various programs allowing iOS modifications (NowListening, Notificator...)
- Open source/Stackoverflow: Contributing for various communities on Stackoverflow and open-source (VLC iOS)

Skills

- Programming Languages: C, C++, Objective-C, Swift
- Frameworks/APIs: UIKit, CoreBluetooth, Network, ExternalAccessory (MFI), NetworkExtension, AVAudioSession
- Technologies: Swift Package Manager, CMake, Fastlane, Carthage/Cocoapods
- Interests: Compilers (Swift Evolution), iOS Security, Embedded systems