

JOHANNES DÖRR

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SENIOR iOS DEVELOPER

Mobile Application Development and Architecture | Mathematical Methods and Algorithms

- 14 years of programming experience with a wide range of technological skills. Running a software development agency for ten years. Founder of 3 startups. Loves working in teams.
 - Proven ability to use mathematical methods to solve real world problems. Analytical thinking and scientific background.
 - Focus on user experience and elegant implementations. Eager to keep up with new technology and trends.
- ✓ Software Architecture
 - ✓ User Experience Design
 - ✓ Mathematics and numerical Methods
 - ✓ API/SDK Design
 - ✓ App Store Mechanics
 - ✓ Entrepreneurship

TECHNICAL EXPERTISE

Languages: Swift | Objective C | C | Python | JavaScript/ES7 | TypeScript | HTML5 | CSS3/SASS
Frameworks: Core Data | Core Location | PushKit | Core Animation | Scene Kit | ARKit | WebKit | XCTest
Technologies: Bluetooth 5.1 (AOD/AOA) | Arduino Development | 3D Product Design

PROFESSIONAL EXPERIENCE

Locandis GmbH | Göttingen, Germany

Jul 2014 – May 2022

Co-Founder / VP iOS Development (before May 2019 Consultant as All Buttons Pressed GmbH)

Developed marketing system to target users based on their location, previously visited locations, and personal interests. My agency developed the technical architecture and provided the backend (based on Python/Django), native apps, and SDKs.

- Successfully implemented geo-fencing for triggering campaigns based on the user's routes in cities, with an accuracy to within 5 meters. Optimized power consumption and circumvented background execution limits on mobile devices.
- Employed iBeacon technology to provide the user with indoor navigation in stores, allowing them to see their location and find products. Leveraged Least Square Method, Kalman and Particle Filtering and other numerical methods to perform multilateration with high accuracy in combination with Augmented Reality.
- Developed flexible SDK to be used in third-party apps, as done by *Volkswagen*, *Deutsche Bahn*, and *Peek&Cloppenburg*.
- Developed white label apps used by *Kaufland*, *hagebaumarkt (Neumünster/Hildesheim)*, and *Autostadt Wolfsburg*

COYO GmbH | Hamburg, Germany

Sep 2017 – May 2019

Senior iOS Developer / Consultant as All Buttons Pressed GmbH

External lead developer and architect for new native messaging app for COYO, a web-based social intranet for businesses. The mission is to provide an excellent mobile experience like that of popular instant messengers, but applied to business contexts.

- Planned and developed modular architecture which is highly performant, testable and ready for upcoming features.
- Leveraged iOS technologies like Core Data, Push Notifications and Collection Views with custom layouts.
- Effectively worked closely with the backend team on designing a streamlined API to provide offline functionality.
- Selected and managed junior and senior developers to build an internal development team to continue the project.

iMIDI Patchbay / Midiflow | Hamburg, Germany

Apr 2013 – Present

iOS Developer

Starting as a side project for personal needs as a stage-performing keyboardist, I developed and still maintain music apps for professional and hobby use. In 2017, I partnered with popular audio routing app "Audiobus" when they introduced MIDI routing.

- Developed low-latency framework for routing and manipulating MIDI (Musical Instrument Digital Interface) data using C and Objective C, and used it as a basis for several apps targeting different customer segments.
- Succeeded in building great user experiences for live musicians by designing and developing custom UIs.
- Promoted the apps by creating websites and tutorial videos, performing SEO, and advertising on Social Media.

EDUCATION

Diploma, Physics, Georg-August-Universität Göttingen (Germany) – 2011

PUBLICATIONS

Learning the semantics of object-action relations by observation

by Eren Erdal Aksoy, Alexey Abramov, Johannes Dörr, Kejun Ning, Babette Dellen, Florentin Wörgötter

2011 The International Journal of Robotics Research

Extending Image Segmentation by Ascertaining Object Permanence Using a Layer-based Memory

by Johannes Dörr

2011 Diploma Thesis, Georg-August-Universität Göttingen

3D Semantic Representation of Actions from efficient stereo-image-sequence segmentation on GPUs

by Alexey Abramov, Eren Erdal Aksoy, Johannes Dörr, Florentin Wörgötter, Karl Pauwels, Babette Dellen

2010 The Fifth International Symposium on 3D Data Processing, Visualization and Transmission (3DPVT2010)

PROFESSIONAL EXPERIENCE (CONT.)

SeFiBo GmbH | Hamburg, Germany

Jun 2015 – Jul 2017

Co-Founder and Developer

My agency provided the complete development of the metacrawler for hotels, flights, car rental and trips. Besides finding the best prices, it allows the user to compose trips and share them with friends. The website is localized to 11 languages.

- Developed parts of the responsive user interface using JavaScript/ES7, React.js and Omnicent.js as well as parts of the backend using Python/Django.
- Used numerous travel agency APIs, like Booking.com, Skyscanner, GetYourGuide and GIATA Multicodes & MHG.
- Created the complete design of the User Interface with regard to ease of use and a great User Experience.
- Developed and installed automatic scripts to post interesting hotels on sefibo's social media channels, especially on the image-savvy Pinterest.

RewardMe GmbH | Göttingen, Germany

Oct 2012 – Dec 2014

iOS Developer / Consultant as All Buttons Pressed UG (haftungsbeschränkt)

My agency provided a complete rewrite of the native apps for Android and iOS, that allowed the user to receive a reward, like a free drink, in a restaurant or bar in return for a post on Facebook, advertising the place.

- Created a redesign of the app, providing a better User Experience.
- Used Core Animation to build custom screen transitions that lead through the process of scanning a QR code, unveiling the contained coupon on the virtual back side, and creating a post on Facebook with predefined or custom message.

pentotype | Göttingen, Germany

May 2011 – Oct 2013

Co-Founder and Developer

My first startup was a web-based hand-drawing tool for tablets that allowed designers and developers to sketch UIs and complete screenflows, which were automatically analyzed to be presented as interactive, clickable wireframes. This project was funded by the German Confederation because it was using image recognition algorithms in a new way.

- Successfully employed various sketch recognition algorithms to find interactive elements in the drawings.
- Developed a scene graph for the HTML5 canvas to allow for fast drawing, zooming and scrolling in the documents.
- Used Stripe to manage payments of the SaaS service.
- Created the complete design of the User Interface and the Corporate Identity.
- Wrote several tutorials and guest articles to promote the startup.

OPEN SOURCE (SELECTION)

CancellablePromiseKit is an extension for PromiseKit. A Promise is an abstraction of an asynchronous operation that can succeed or fail. A CancellablePromise, provided by this library, extends this concept to represent tasks that can be cancelled/aborted.

github.com/johannesd/CancellablePromiseKit

APPS (SELECTION)



iMIDI Patchbay lets you organize your whole MIDI setup from one central point. Do you often divide your keyboards into zones to assign different sounds which might come from external sound expanders? Do you need to send Program Changes to your MIDI equipment? Do you want to integrate your music-making apps into your live gear? Well, then iMIDI Patchbay is definitely the right tool for you!

itunes.apple.com/app/imidipatchbay/id622204114



Midiflow for Audiobus 3 comes in a set of independent MIDI apps that can be interconnected in various ways. Modify MIDI data coming from other apps or external MIDI devices to create interesting effects and take your performances to a new level.

itunes.apple.com/app-bundle/id1220601072



Midiflow allows you to send MIDI from app to app in a similar way to what you already do with audio. That way, you can sync apps with each other or send MIDI parts from a sequencer app to different synth apps. You can also route the MIDI from your keyboard to apps and assign different key zones to them. Different settings can be stored as a preset, recalled later and inserted into another preset. Furthermore, all MIDI transfer can be monitored in order to find problems or just to learn what MIDI is doing (normally) behind the scenes.

itunes.apple.com/app/midiflow/id879915554