JAVIER DE MARTÍN GIL

iOS Engineer, Telecommunications Engineer & Machine Learning enthusiast
Bilbao, Spain. Available to relocate after graduation in July 2020

javierdemart.in
linkedin.com/in/javierdemartin
github.com/javierdemartin
javierdemartin@me.com

WORK EXPERIENCE

iOS Developer @ VirtualCare Global Solutions SL   08-2019 / Currently

Hired as a freelance to develop an always on VPN for iOS devices using Network Extensions. Supports network interface changes and automatically redirects traffic through the tunnelled interface. Managed multiple VPNs on a single device to support multiple VPN profiles.

`Swift`, `OpenVPN`, `Network Extensions`, `Coordinator Pattern`, `MVVM`, `ReactiveSwift`, `ReactiveCocoa`, `Fastlane`, `Instruments Profiling` & `Git`

iOS Developer @ Bytek Smart Solutions SL   02-2020 / 05-2020

Part-time. iOS app for a developing eHealth Alexa-based platform. Worked in parallel with the hardware team. Developed the iOS app to set up the hardware and configure users. Registered users with Amazon Cognito. Provisioned the device with the WiFi configuration for Alexa using CoreBluetooth. Stored user medication reminders and intakes using Amazon DynamoDB.

`CoreBluetooth`, `Swift`, `AWS Cognito`, `Coordinator Pattern`, `MVVM`, `ReactiveSwift`, `ReactiveCocoa`, & `Git`

iOS Developer @ Aholab Research Group   04-2018 / 07-2018

Text To Speech for spanish and basque speakers. Adapted propietary C/C++ library to be compiled for iOS devices. Linked it with Objective-C bridging headers to call the library's functions from Swift code. Designed the app to synthetize phrases and common words.

`Swift` & `AVFoundation`

PROJECTS

Neural Bikes `neural.bike`   2017 / Today

Open Source live Machine Learning time series predictions of bike sharing availability for different services. Storing data from different Open Data portals on an InfluxDB database to train a LSTM neural network. Performed K-means clustering analysis to identify usage patterns. Daily predictions are created automatically using previous daily availability and exposed through a public JSON API..

`Python`, `Keras`, `LSTM Neural Networks`, `Influx.DB`, `CloudKit.JS`

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iOS app to consume the generated prediction data for the different available services. Providing users additional insights comparing the predictions and daily historic availability for each station.

`Swift`, `CoreLocation`, `Fastlane`, `RXSwift`, `Reactive Swift` & `In App Purchases`

Bilbao Dynamics `bilbaodynamics.com`   2013 / 2019

Founded a non-profit with freshman friends to teach kids robotics, electronics, 3D printing & programming. Built our own Arduino-based robots with all the necessary components to be able to teach.
`Arduino` & `3D Printing`

EDUCATION

MSc in Telecommunications Engineering   10-2018 / 07-2020

Thesis: "Improving bike sharing predictions using LSTM neural networks with Machine Learning and clustering analysis"

BSc in Telecommunications Engineering   09-2013 / 09-2018

Thesis: "Neural network model based model to predict availability of urban bike sharing system"

Relevant coursework: TCP/IP Protocol Stack, Network design, Programming, Electronic Design, FPGAs, RF & Antennas

LANGUAGES

AWARDS

Spanish Native & **English** Proficient

Bizintek, 2nd place awarded to best BSc thesis