# Marc Solà Nadal

#### IT enthusiast with background in electronics, web development and Linux.

###### [ [GitHub](https://github.com/marcsolanadal) ] . [ marcsolanadal@gmail.com ] . [ +34 636290957 ]

## Skills

**Web:**

* *Languages:* Javascript, Typescript, HTML/CSS
* *Frameworks:* React, Angular, WebComponents
* *State:* Redux, XState (Hirarchical State Machines), RxJs
* *Testing:* Jest, Testing library, Cypress

**Embedded:**

* *Languages:* C
* *PCB:* Altium, Eagle, KiCad
* *RTOS:* FreeRTOS
* *Platforms:* RP2040, ESP32, Microchip, Texas Instruments, Altera

**System Administrator:** Unix, Network administration, Linux kernel optimization, Docker, Bash, Security

**Soft Skills:** Agile, Source control, TDD, Technical writting, Technical interviews, Vim, Meta-learning

## Experience

**Senior Front-End Developer** (GFT Technologies, Mar 2017 - Nov 2021 · 4 yrs 9 mos)

* Developed Front-End solutions on the banking sector.
* Planned new features with the product owner, from idea to production.
* Solved architectural problems as part of the Front-End architecture team.
* Advocate of best practices, testing, new tools and technologies.

**Full-Stack developer** (atSistemas, Oct 2015 - Jun 2016 · 9 mos)

* Developed Back-End of in-house automatization tools for building hybrid mobile applications.
* Worked on insurance sector project solving critical issues with product owner.

**Full-Stack developer** (Micronax, Jun 2014 - Dec 2014 · 7 mos)

* Implemented OAUTH2 login protocol for multiple vendors in a hybrid moblie game.
* Reported directly to the product owner in an international team based in Norway.

**System administrator** (Barcelona University, Apr 2011 - Aug 2013 · 2 yrs 5 mos)

* Managed and maintained a RedHat cluster and network of medium size.
* Compiled and optimized the linux kernel to improve the performance of cluster.
* Helped all network users.

**Freelance C# Developer** (Coralsis, Jul 2009 - Aug 2009 · 2 mos)

* Developed application for online video streaming survilance.

**Junior Developer** (Inditex, Apr 2008 - Jul 2008 · 4 mos)

* Performed helpdesk and some basic .NET coding tasks.

## Education

**Degree in Electronics, Barcelona University** (2009, 24 ECTS left)

* ERASMUS in Norwegian University of Science and Technology (2013-2014)

**Certificate of Higher Education in Computer Programming** (2008-2010)

## Personal Projects

**Smart Egg Incubator** (ongoing)

* Egg incubator with automatic egg turning, temperature and humidity control using FreeRTOS and C.
* Raspberry Pico (RP2040), BME/BMP280 with I2C, Servo control using PWM, Flash memory to store position.
* Flashing with SWD (using Raspberry Pi) and debugging with gdb.

**Custom keyboard**

* 36 key orthogonal split keyboard using QMK firmware.
* Improved PCB with KiCAD

**Electrocardiogram board**

* Electrocardiogram sensing board with three electrode system.
* Used Texas Instruments ADC’s and microcontroller with UART to log data.

**Biped robot**

* Walking robot for Campus Party biped fighting competition.
* Used Texas Instruments MSP430F5438 as microcontroller.
* Coded HAL’s for UART, Timers, WDT, ADC and Display.