

# **Ruben Roque Dias**

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25th of September, 1993



rubenroquedias.com

rubenroquedias

### **Profile**

I hold a master's degree in Electrical and Computers Engineering since 2017 and I currently work as a Simulation Developer and Consultant specialising in discrete-event simulation.

I am an Engineer who loves to code and explore new technologies. So far, I have had the opportunity to work professionally with different programming languages, such as Java, Javascript and C#. Additionally, I began learning iOS development on my free time soon after finishing my degree, which has quickly become a passion.

I am efficient and versatile. Working in a team environment and having direct contact with clients has made me an effective communicator and a proactive team member. I am a fast learner, and always eager to increase and share my knowledge.

### iOS Development

I am a self-taught iOS developer. My most noteworthy project is the financial tracking app I have been developing on my free time, which allows me to explore and test what I have learned. I started out learning from Udemy, as well as taking several other courses from independent teachers and which are well known developers in the Swift community.

So far I have worked with some interesting iOS and mobile-related technologies such as Firebase, RESTful services, OneSignal (for push notifications) and a variety of pods (frameworks).

Please take a look at my personal website, rubenroquedias.com, where I go into more detail regarding my knowledge of iOS and the relevant projects I've worked on.

### **Relevant Work Experience**

April 2018 -December 2018

#### Front-End Developer

@ Dreamo - Balanced Work Systems, Matosinhos, Portugal

- · Develop interfaces for managing workflows and communication using Javascript, jQuery, KendoUl and of course, HTML and CSS
- Create back-end services and to support the functionalities being developed, using C# and SQL Server
- · Develop mobile app prototypes for managing communication & notifications using Ionic and PhoneGap

#### Education

September 2011 -March 2017

### Master in Electrical and Computers Engineering

@ Faculty of Engineering of the University of Porto, Portugal

- My branch of study was Automation, so I worked on automation applications for different PLC and MES softwares
- · Studied industrial/applied electronics, embedded systems and industrial informatics, developed practical projects using microprocessors (e.g. Arduino)
- Specialised in Industrial Management, focusing on enterprise information systems, decision support systems and operations management

### Master's Thesis - Models for Improvement Management and Operational Performance @ INESC TEC, Porto, Portugal

- · Explored Simulation as a tool in supporting decision making in the context of manufacturing industries
- Created a virtual factory model in AnyLogic (Java) to simulate a job-shop environment and test improvement strategies
- Used InfluxDB for real-time data storing to handle the data generated by the simulator (factory model)
- Provided real-time data visualisation using Grafana

September 2014 -March 2015

#### **Erasmus+ Exchange Program**

@ Wrocław University of Technology, Poland

### **Skills**

### **Software**

- Xcode
- · Simio
- · AnyLogic
- · MS Office (Excel, PowerPoint, Word)
- FlexSim (basic)
- Grafana (basic)
- InfluxDB (basic)

## · Swift

- Java
- · Javascript / jQuery

**Programming Languages** 

· C# (basic)

· C (basic)

· Python (basic)

- · HTML / CSS
- SQL

### **Additional Work Experience**

January 2019 -Present

#### **Simulation Developer & Consultant**

@ INESC TEC, Porto, Portugal

- · Lead Simulation projects for improving operational results and KPIs of manufacturing companies
- Develop virtual factory models using discrete event simulation (Simio software)
- · Perform data analysis using Excel
- · Train new colleagues that come to research/work in this area, and guide master's students during their thesis

March 2017 - March 2018

### Simulation Developer & Researcher

@ INESC TEC, Porto, Portugal

- · Develop virtual factory models using discrete event simulation (Simio software)
- Leverage Simio's API using C# for connectivity with with 3<sup>rd</sup> party technologies
- · Perform data analysis using Excel, and data processing with Java
- Research within European H2020 projects, ScalABLE and FASTEN, on real-life simulation applications to leverage the emergence of Industry 4.0

September 2015 -

#### **Teaching Assistant**

February 2016

@ Faculty of Engineering of the University of Porto, Portugal

· Assist in laboratory classes of the Digital Systems Laboratory course during my Master's

### **Scientific Conferences**

September 2017

Presenter: A Simulation and Optimisation Framework for Integrated Planning and Process

Design

@ ENEGI 2017, Porto, Portugal

June 2017

Presenter: Models for Improvement Management and Operational Performance

@ IO 2017, Valença, Portugal

### Languages



Portuguese • native language



English • fluent



German • basic

#### **Hobbies**

Technology, fitness, music, team sports with friends (football, tennis), traveling