David Alejandro Rondón Berrío



- CRA 76B # 107 A 27, Medellín, 05001000, Colombia
- (+57)4 5800322 **(**+57)3016332408
- <u>blackphotografy@gmail.com</u>
- Electronic Engineer | 2015 | University of Antioquia

Sex Male | Date of birth 11/03/1991 | Nationality Colombian

https://www.alejorondon.com/ https://www.linkedin.com/in/alejorondon/

Career Summary

David Rondón is an electronic engineer who has worked for more than 4 years in education and both hardware and software development; in regard to the hardware, he has designed and implemented various IoT devices for data acquisition & remote controlling and ,respect to the software, he has built different desktop, web and mobile apps using different programming languages and frameworks such as Oto-Heat-Str Adv by Globant. He loves algorithms and he can easily learn other programming languages.

Nowadays, David Rondón has been studying and working hard to get and improve his skills about web development to become a great UX/UI front-end developer.

Summary of Qualifications

Skills

- C, C++, QML*
- HTML & CSS*
- Javascript*
- Node JSExpress JS
- Git & GitHub*
- ScrumReact**
- Vue**
- MongoDB
- Arduino*
- MySQL
- Java & Python
- ESP32 IoT*
- Eagle CAD*
- Amazon Alexa
- Visual basic
- Apache serverOpenCV

Mar. 2019 - Now

MATLAB*

Languages

• Spanish (native speaker)

• English (B1-intermediate level)

Career History

Parque Explora, Medellín, Colombia

Interactive technologies professional (Interactive museums)

Project: Reacciona a tiempo - Web app

- Coordinated the project production
- Defined technologies and devices to be used(Unity 3D)
- Elaborated the software architecture
- Developed the software
- Compiled the software to different platforms: Android, iOS and Web
- Made performance and security testing
- Wrote technical and user manual

•

^{*}Advanced level

^{**}Basic to intermediate level - Now, I'm studying them

Project: Parque Explora map - Web app

- Coordinated the project production
- Defined technologies and devices to be used(Leaflet)
- Developed the software
- Deployed the app in the web server

Project: Crea tu música - make your music

- Coordinated the project production
- Defined technologies and devices to be used
- Compiled and integrated OpenCV libraries for images processing (Qt Creator)
- Successfully, integrated the Ximea camera SDK with OpenCV libraries
- Designed and implemented the algorithm to recognize different patterns through a Ximea Camera
- Elaborated the software architecture
- Made proprietary libraries for Midi reproduction

Project: Ministerio de educación nacional (MEN) - Maker space

• Defined the technologies, devices and contents for a *maker space* into the Colombian Ministry of National Education

Project: Laberintos - labyrinths (http://museodelamola.org/)

- Defined technologies and devices to be used
- Developed the main software to play a 4K video-loop and implemented an homography module for correcting the projector perspective (C++, QML and Qt Creator)

Project: Atuendos – *Guna dule clothes* (https://fundacionalbertomotta.org/museo-de-la-mola/)

- Defined technologies and devices to be used
- Developed the synchronization software (C++, QML and Qt Creator)

Project: From the bridge of the ship - *youtube demonstration* (http://visitcanaldepanama.com/centro-interactivo-del-canal-de-panama/)

- Designed, produced and programmed the electronic system that process and send the information generated for each device in the control panel to the main software (Eagle, Arduino, C++ and Visual studio)
- Elaborated the finite states machine (FSM) that define the behaviour of the main system
- Successfully, developed the main software of the interactive simulator (C++, QML and Qt Creator)
- Succeeded to synchronize the playback of three videos with dynamic playback of multiple audios
- Implemented the user interface

ITM, Medellín, Colombia

Jul. 2017 - Nov. 2019

As an occasional lecturer He has taught about...

- Fundamentals of programming using pseudocode, C, C++ and processing
- Fundamentals in electronic both analog and digital
- Microcontrollers principles
- Fundamentals of Arduino platform
- Sensing and automation

Rhemo, Medellín, Colombia

May. 2017 – Feb. 2019

TI and instrumentation designer (Project Rhemo Care – Equine healthcare)

- Designed the finite states machine (FSM) that define the alerts system of the Rhemo mobile app
- Designed and implemented a light protocol, based on MQTT, for the data collection from horse farms through GPRS networks.
- Implemented, in an embedded system, a proprietary algorithm for the heart rate acquisition in horses (Arduino, ESP32, Wiring and C++)
- Built two electronic wireless devices using Bluetooth low energy (BLE), GPRS and GPS

University of Antioquia, Medellín, Colombia

Mar. 2014 – Jan. 2016

Design engineer (Project SMARt - public transportation and research)

- Designed and implemented an electronic sensor subsystem to extract relevant information from public busses. (C, C++ and Qt)
- Developed a specialized UI for the sensors data visualization (C++ and Visual Studio)
- Supported the development of the Auto-diagnosis module (DBUS(Linux), C++ and Qt)

Education

Acamica, Medellín, Colombia (*in progress*)

Feb.2021 - Aug. 2021

https://www.acamica.com/desarrollo-web-front-end

Desarrollo web front end

Make it real bootcamp, Medellín, Colombia

Feb. 2020 - May. 2020

https://makeitreal.camp/

Fullstack JavaScript

University of Antioquia, Medellín, Colombia

Aug. 2008 - Sep. 2015

http://www.udea.edu.co/
BS, Electronic Engineering