

CURRICULUM VITAE

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Professional Career

I'm looking to positioning in the field of software engineering, where I can learn and develop my skills and abilities. My latest projects have allowed me to acquire skills in frontend, backend, mobile app developing and databases handling, also as an electronic engineer I have experience with instrumentation, automation and renewable energy (Photovoltaic). I have effective organizational and communication skills.

Skills Summary:

- Hardware and software system developer.
- Web app developer.
- Mobile App developer.
- Backend Developer.
- Databases handling.
- Design, build, install and maintain power electronics, instrumentation and automatic control systems applied in industry.
- Development or maintenance projects.
- Experienced in acquisition of field instruments and control systems.
- Design, simulation and implementation of independent photovoltaic systems.
- Installation and calibration of weather stations.
- Control of AC and DC electric machines.
- Design and implementation of electronic systems (microprocessors, embedded cards, single board computers, DAQ, etc)
- Advanced English.

Personal Details:

Age: 26

Sex: Male

Family Status: Single

Residence: Quito - Ecuador

Academic Preparation:

2006: Elementary School: "Ntra. Sra. De Fátima", Ibarra – Ecuador

2012: High School: "Sánchez y Cifuentes", Ibarra – Ecuador

2019: University: “Escuela Politécnica Nacional”, Quito – Ecuador
Electronics and Control Engineer

Language Skills:

Spanish: Mother language

English: Advanced in writing, speaking & reading.

IT Skills:

- Operating Systems: Windows, Linux, MacOS
- Programming Languages: Assembly, C, C++, C#, Python, JavaScript, Java, Kotlin, Dart.
- JavaScript Frameworks: : NodeJS, ReactJS, Angular.
- Other technologies: .Net, .Net Core, Flutter, Firebase Storage, Firebase Cloud Messaging.
- Databases: SQL Server, MySQL, MongoDB.
- Environments: Visual Studio, Visual Studio Code, Android Studio, IntelliJ
- Microsoft Office
- Autocad 2D & 3D
- Matlab (Simulink)
- Dialux (Electrical Installations Design Software)
- Powersim (Power Electronics Simulation Software)
- Proteus (ISIS) (Digital Electronics Simulation Software)
- Unity Pro by Schneider (PLC Programming Software)
- TIA Portal by SIEMENS (PLC Programming Software)
- RSLogix by Allen-Bradley (PLC Programming Software)
- LOGO by SIEMENS (PLC Programming Software)
- Productivity Suite by Automation Direct (PLC Programming Software)
- FLUIDSIM by FESTO (Electropneumatic Design software)
- LabVIEW
- InTouch Wonderware (HMI Programming Software)
- ISE Design Suite by XILINX (FPGA Programming Software)
- Arduino, Code composer by Texas Instruments (IDE for embedded systems)
- PVSyst Photovoltaic Software (Photovoltaic System Design Software)
- System Advisor Model by NREL (Photovoltaic System Design Software)

Organizational Experience:

Organization: NIMBUSOFT CIA. LTDA.

Period: January 2020 – Present

Designation: Software Developer

Main Responsibilities:

- Front end web develop (ReactJS, AngularJS, JQuery).
- Back end develop (Kotlin, NodeJS, .Net Core).
- Bases de datos SQL server, MongoDB

Achievements:

- Web Application based on React for the clients of Imperial (US Company dedicated to import and export products).
- Web Application based on React and backend based on Kotlin for administrate the hole industrial and transportation process of Gadere (Ecuadorian Company dedicated to recollect and treat industrial and medical waste), also in this project I had to complete some correctional activities in the mobile platform (Java Android).
- Analysis and implementation of an administrative system for the emelnorte electric company, specifically in the acquisition, treatment and storage of measurements from the SMARTMATION luminaire integrated control platform.
- **Actual Project** => Doctor Trace is a technological solution for any user who require access to a face-to-face or virtual medical consultation with any registered medical specialist. This technological solution makes access to health more efficient and easier. For this project I worked with RCB as the main developper of the mobile part of the solution, I used Flutter along with agora.io, Firebase Cloud Messaging and others to develop two mobile apps one for patients and other for doctors... also I programmed some screens in the web platform of the solution and in backend with Kotlin.

Organization: Escuela Politécnica Nacional, Quito

Period: Jun. – Oct. 2018

Designation: Research Assistant

Project Description: Energy gain of a photovoltaic system due to solar tracking in one and two axes in equatorial regions with application to mobility systems: case of electric bicycles.

Main Responsibilities:

- Implementation of two independent photovoltaic systems, whose panels have solar tracking in one and two axes.
- Implementation of a system for measuring and recording electrical variables for photovoltaic systems.
- Optimization of the hardware and software of a station for recharging electric bicycles, powered by solar energy.

Organization: Escuela Politécnica Nacional, Quito

Period: Sep. – Dec. 2018

Designation: Meteorological Calibration Assistant

Project Description: Calibration of the meteorological station sensors of the University.

Main Responsibilities:

- Safe transportation of the complete weather station, to and from the Environment Secretary of Quito.
- Care of the integrity of each part of the weather station during the calibration process.
- Correct installation of the weather station.
- Learning the operation of the entire station, in addition to the procedures for calibrating and maintaining weather sensors.

Organization: Escuela Politécnica Nacional, Quito

Period: Mar. – May. 2018

Designation: Laboratory Intern.

Main Responsibilities:

- Making printed circuits for semiconductors triggering.
- Preventive and corrective maintenance of laboratory equipment.
- Guide students for the use of the instruments.

Organization: UNACEM ECUADOR S.A., Otavalo

Period: Sep. – Oct. 2017

Designation: Automation Intern.

Responsibilities:

- Creation of a database with the most relevant information regarding the instruments found in the SCADA, implemented in SIMATIC PCS 7 process control system of SIEMENS.
- Creation of a connection guide of instruments connected to each PLC 400 SIEMENS.
- Analysis and sizing of a UPS system for the servers of the cement plant.

Organization: Instituto Geográfico Militar, Quito

Period: Feb. – Mar. 2017

Designation: Engineering Intern

Project Description: Creation of a geo locator device with geocentric height reading in real time, as well as temperature, pressure and humidity.

Responsibilities: Acquisition and conditioning of signals from environmental conditions sensors.

Organization: Curso de Nivelación “Stephen Hawking”, Otavalo

Period: Agos. – Oct. 2014

Designation: Assistant Professor and Math & English Teacher

Responsibilities: Teaching and application of differential and integral calculus (basic), English teacher at intermediate level.

Additional training courses:

- Python multipurpose.
- Udemy: ReactJS.
- Udemy: Flutter the complete guide.
- Udemy: Easy backend with Kotlin
- Gnuplot 2D & 3D
- Health and safety inside the industry
- Electro-pneumatic controls
- Participation “Jornadas de ingeniería eléctrica y electrónica de la Escuela Politécnica Nacional” editions : XXV, XXVI y XXVII.
- Participation “WORKSHOP FOR THE GENERATION OF RESEARCH NETWORKS IN PHYSICS AND TECHNOLOGY IN COLLABORATION WITH THE EUROPEAN LABORATORY-CERN”
- Participation “MEETING OF TECHNOLOGY, ENTREPRENEURSHIP AND INNOVATION: TEI-2016”
- Participation “AUTOMATION AND INDUSTRIES 4.0 CONFERENCE”