

# Guido Santillán

FULL-STACK WEB DEVELOPER · MECHATRONICS ENGINEER

Quito, Ecuador

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"Be the change you want to see in the world."

## Summary

Mechatronics Engineer with experience in design and improvement of automated processes, innovation of equipment and production systems using computer-aided design software to develop and test potential solutions. Proven skills in CAD/CAM/CAE, mechatronic design, PLC, embedded systems, programming, design of machine elements, integrated manufacturing systems. Additionally, he spends his free time in the research of trending and emergent technologies and its future applications in the country.

At the present time, he is actively looking forward to expand his knowledge, improve his skills and obtain experience related to the development of industrial solutions with a local and global focus.

## Projects

### Web Page Developer

INDEPENDENT

Quito, Ecuador

April 2018 - Current

- Development of a web app focused on user's productivity improvement.
- Redesign of Asociacion Ecuatoriana de Franquicias website.
- Redesign of Ecuafanquicias website.
- Redesign of Villagran Lara Asociados website.
- Development of a web app focused on user's productivity improvement.

### Project Manager

ECUAFRANQUICIAS

Quito, Ecuador.

June 2017 - April 2019

- Franchisable business's operative and administrative processes documentation and management.
- Part-time job based-on time availability.

### Research and Teaching Assistant of: Computer-aided Design, Manufacture and Engineering subject (CAD, CAM, CAE)

DEPARTMENT OF ENERGY AND MECHANIC SCIENCES - ESPE

Quito, Ecuador

Nov. 2015 - Mar. 2016

- Modelling, analysis and manufacture of a vehicle-based RIN.
- Out-come report generation, elaboration of processes sheets, G-code programming, design of the vehicle-based RIN using computer-aided software, strain simulation and post-process of the manufacturing operations.

### Undergraduate Researcher, Manufacturing Processes Lab.

ARMY FORCES UNIVERSITY - ESPE

Quito, Ecuador.

Jan. 2015 - Mar. 2015

- Design and development mechanism for mobile robots mechanisms using 3D printing and laser cutting techniques.

## Experience

## Web Page Developer

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## Education

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### International Exchange Student

TECHNISCHE HOCHSCHULE BRANDENBURG

Brandenburg an der Havel, Germany

March - Sept. 2016

- Development of thesis project: *"Implementation of HIL/SIL simulation techniques for real-time tests of vehicle models using DSPACE platform"*
- GPA: A-
- System modelling
- Vehicle dynamics
- Embedded systems

### Bachelor of Science (B.Sc.), in Mechatronics Engineering

ARMY FORCES UNIVERSITY - ESPE

Quito, Ecuador

Apr. 2011 - Feb. 2016

- GPA: 17.43/20
- Industrial Robotics.
- Mechatronic Automation
- CAD/CAM/CAE

### High School, Diploma with a specialization in Mathematics and Physics

COLEGIO MUNICIPAL EXPERIMENTAL "SEBASTIÁN DE BENALCÁZAR"

Quito, Ecuador

Aug. 2005 - Aug. 2010

- GPA: 18/20

## Skills

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LANGUAGES:

**Spanish** Native  
**English** Fluent - Sufficiency in English Certificate completed at ESPE  
**German** Basic - A1 completed at Technische Hochschule Brandenburg - Germany

## PROGRAMMING EXPERIENCE:

**Web development** HTML, CSS, SCSS, Bulma, Javascript, GIT, Webpack, TypeScript  
**Frontend** React, Redux, React-Router, Next.js, Apollo, Gatsby, Progressive Web Apps  
**Backend** NodeJS, Express, GraphQL, Docker, Web Sockets  
**Testing** Jest, Enzyme  
**Databases** PostgreSQL, MongoDB, Redis  
**Dev Ops** AWS Lambda, Circle CI  
**Hosting** Netlify, Heroku  
**Networking** HTTP server with Apache, DNS, DHCP using Ubuntu Server  
**CMS** Wordpress  
**Mobile** React Native  
**Desktop** Electron

**Development** Python, C, C++, Java, Assembler (micro-controller level)  
**Industrial-based** LADDER Programming, G code  
**Others**  $\LaTeX$

## SOFTWARE EXPERIENCE:

**CAD/CAM/CAE** Solidworks, AutoCAD 2D/3D, Siemens NX  
**Mathematical Analysis** Matlab/Simulink, LabVIEW  
**Software Development** Arduino, Processing  
**Electronic Design** Proteus, Multisim  
**Automation** Wonderware InTouch, RSLogix, MicroWin Step7, FESTO Fluidsim, Automation Studio  
**Office Automation** Microsoft Office, Project, Visio  
**Media** Adobe Indesign, Adobe Illustrator, Sony Vegas  
**Operating Systems** Windows, GNU Linux distributions (Ubuntu, Linux Mint)

## Honors & Awards

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2016	<b>Honorable Mention</b> , Given by Army Forces University's principal	Quito, Ecuador
2016	<b>Winner</b> , EXPOINDUSTRIAL 2016, Mechatronics Competition – FESTO CHALLENGE	Quito, Ecuador
2016	<b>High Performance Scholarship</b> , Given by Army Forces University for the development of research projects in Germany	Quito, Ecuador