

Guido Santillán

MECHATRONICS ENGINEER · IT CONSULTANT

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.

Education

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: 19/20 (A-)
- System modeling.
- 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

Experience

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 - March 2016

- Elaboration of complementary teaching resources.
- Modeling, 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.
- Maintenance and review of the machines and equipment from the Manufacturing Processes Lab.

Project Manager

ECUAFRANQUICIAS

Quito, Ecuador.

Oct. 2016 - January 2017

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

Undergraduate Researcher, Manufacturing Processes Lab.

ARMY FORCES UNIVERSITY - ESPE

Quito, Ecuador.

Jan. 2015 - Feb. 2015

- Design and development of mobile robots mechanisms using 3D printing and laser cutting techniques.
- Assistance in the implementation of projects performed at the lab.

Math, Physics, Robotics, Office Automation teaching for beginners.

INDEPENDENT WORK

Quito, Ecuador

June 2013 – February 2016

- Teaching focus on high school students.

Web-app developer

FREELANCE

Quito, Ecuador

January 2017 – Currently

- Development of a web app focused on user's productivity improvement.

Skills

LANGUAGES:

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

SOFTWARE EXPERIENCE:

CAD/CAM/CAE	AutoCAD 2D/3D, Solidworks, Siemens NX
Mathematical Analysis	Matlab/Simulink, LabVIEW, MathCad
Electronic Design	Proteus, Multisim
Automation	Wonderware InTouch, RSLogix, MicroWin Step7, FESTO Fluidsim, Automation Studio
Software development	Arduino IDE, Processing, AVR Studio, Visual Studio, Android SDK.
Office automation	Microsoft Office, Project, Visio
Media	Sony Vegas, Adobe Illustrator, GIMP, MAGIX Composer.
Operating Systems	Windows XP,7,8,10, GNU Linux distributions (Ubuntu, Linux Mint)

PROGRAMMING EXPERIENCE:

Development	C, C++, Java, Assembler (micro-controller level)
Industrial-based	Ladder Programming, CNC G and M code
Networking	HTTP server with Apache, DNS, DHCP using Ubuntu Server.
Web development	HTML5, CSS3, PHP, Ruby on Rails.
Others	LaTeX, Wordpress, GIT, Cloud9, Heroku.

Honors & Awards

2016	Honourable Mention , Delivered By Army Forces University's principal.	Quito, Ecuador
2016	Winner , EXPOINDUSTRIAL 2016, 3rd Mechatronics Competition – FESTO CHALLENGE	Quito, Ecuador
2016	High Performance Scholarship , Delivered by Army Forces University for the development of research projects in Germany.	Quito, Ecuador