MSc. Juan José **Guzmán Cruz**

Java Fullstack and Hybrid apps Developer

Mexico City

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

Developments

Employee activities control
Hybrid

`https://youtu.be/4HOJAOxD78Y`

Hybrid application for assigning activities to employees with calendar display.
2023

Ionic, Typescript, Angular, Fullcalendar, Firebase authentication, Firestore

Study guide
Hybrid

`https://youtu.be/mKVgPVJiC-4`

Hybrid app for topical study guide with timer.
2023

Ionic, Typescript, Angular, IndexedDB

Tlatoa
Hybrid

`https://play.google.com/store/apps/details?id=com.developersmix.tlatoa`

Hybrid app helping in the study of languages. It allows you to translate, save, practice and share
vocabulary from the study languages. It includes 4 games to help memorize new vocabulary. Option
to backup the information that the user generates when using the application.
2022

Angular, Ionic, Typescript, AdMob, InAppPurchase, AppRate, Bootstrap, Prime Faces, Font Awesome, Cloud Translation API, Azure Text To Speech
API, Google Drive API, Firebase Authentication

AcquisitionLite
Fullstack

`http://acquisition.developersmix.com`

Fullstack app for drugs acquisition process based in user access control with roles and privileges. The
modular architecture is used for improve maintenance and growing.
2021

➜ Frontend
- Angular, Typescript, Bootstrap, Prime Faces, REST services, Guards, Notifications with socket libraries.

➜ Backend
- JAVA, Spring Boots, Spring Security, JPA, Hibernate, MySQL, Apache Tomcat, Sockets.

Keep Info Secure
Android

`https://play.google.com/store/apps/details?id=com.developersmix.kis`

Android app to save passwords and private information. It is possible to store data in 6 different
categories: Bank accounts, Emails and Social networks, Services, Internet subscriptions, Devices and
Notes.
2021

Java, XML, SQLite, Android, AES encrypt, Google Drive API

ControlIncidencias
Fullstack

`http://incidencias.developersmix.com`

Fullstack app for work absences control based in user access control with roles and privileges. The
modular architecture is used for improve maintenance and growing.
2020

➜ Frontend
- Angular, Typescript, Bootstrap, Prime Faces, REST services, Guards, inactivity watcher.

➜ Backend
- JAVA, Spring Boots, Spring Security, JPA, Hibernate, MySQL, Apache Tomcat.

IncidenciasWeb

https://github.com/juanjosegc77/IncidenciasWeb

Java Web MVC Project to control Employees and Vacation.   *2018*

JAVA with MVC model, JSP, Javascript, Bootstrap, MySQL

AICare
Android

https://github.com/juanjosegc77/AICare

Development in Android for the thesis "Filter for complex systems type black box on mobile devices"
of the Master of Science in Mobile Computing Systems in the National Polytechnic Institute.   *2019*

JAVA, XML, Android Studio, SQLite, MPAndroidChart

Modelo_Python
Python

https://github.com/juanjosegc77/Modelo_Python

Filter model for complex systems   *2018*

Python 3, pylab, matplotlib, pyplot, PdfPages, numpy, seaborn

LC3-en-FPGA
VHDL

https://github.com/juanjosegc77/LC3-en-FPGA

FGPA implementation of an LC3-basic Microprocessor.   *2018*

- DE2-115 Development Kit (FPGA Cyclone IV EP4CE115F29C7).
- Quartus-Prime / Quartus-II Web Edition synthesis tool.
- ModelSim simulation tool for Altera Web Edition.

Simulador-de-desfibrilador
VHDL, C, Matlab

https://github.com/juanjosegc77/Simulador-de-desfibrilador

Implantable defibrillator simulator using an MSP430g2553 microcontroller and Matlab.   *2016*

- An ECG output signal is generated at the headphone jack of a computer using MATLAB.
- The ECG signal is received and sampled on the MSP430.
- The MSP430g2553 microprocessor indicates by lighting a green LED the existence of the R component of the ECG signal. It also returns a value of 0 if component R exists and a 1 otherwise.
- The computer receives the return value from the MSP430 into the microphone jack. With MATLAB this value is read, if the value is 0 nothing happens, if the value is 1 the playback of the ECG signal is restarted.

Work Experience

Java Fullstack and Mobile Developer
Mexico City, Mexico

Freelance   *October 2018 – July 2023*

- Employee activities control - 2023 - Hybrid
- Study guide - 2023 - Hybrid
- Tlatoa - 2022 - Hybrid
- AcquisitionLite - 2021 - Fullstack
- Keep Info Secure - 2021 - Android
- ControlIncidencias - 2020 - Fullstack
- IncidenciasWeb - 2018 - Java Web

Administrative support A8
Mexico City, Mexico

Regional Hospital "Lic. Adolfo López Mateos" (Clinical File)   *October 2013 – July 2023*

- Clinical records preparation, management and safekeeping.

Social Service
Mexico City, Mexico

Regional Hospital "Lic. Adolfo López Mateos" (Department of Biomedical Engineering)   *March 2013 – September 2013*

- Inventory update support. Contracts monitoring from medical equipment maintenance companies.

Administrative support A4
Mexico City, Mexico

Regional Hospital "Lic. Adolfo López Mateos" (Assistance Control and Human Resources)   *January 1999 – February 2013*

- Development and implementation of macros with Excel and Visual Basic to automate incidences processes in the assistance control department.
- Development and implementation of macros with Excel and Visual Basic to automate the justification processes of Nursing Coordination incidences.

Teacher

National College of Technical Professional Education (Academic area)

Mexico City, Mexico

August 1995 – January 1996

- Introduction to computing course in the Specialization course in Administration and Teaching in Nursing.

Social Service

Herman Hollerith Institute (Computer lab)

Mexico City, Mexico

January 1995 – November 1995

- Software installation, support for students, support for teaching staff, hardware maintenance, support for the diskette vaccination campaign, spreadsheet formats elaboration.

Education

MSc. Mobile Computer Systems

GRADUATE(National Polytechnic Institute)

Mexico City, Mexico

2017 – 2019

- Filter for complex black box systems on mobile devices (Honorific mention).

BEng. Biomedical Engineering

UNDERGRADUATE(Autonomous Metropolitan University)

Mexico City, Mexico

2009 – 2014

- Graphical user interface to measure evoked potentials: A LabVIEW based application for the device Neuropack Σ.

Programmer analyst

TECH(Herman Hollerith Institute)

Mexico City, Mexico

1994 – 1996

Languages

Spanish (Native), English (Proficient), Russian (Basic), Thai (Basic)

Technical skills

Good level

Linux, Windows, Java, Python, Spring Boot, Angular, XML, TypeScript, JavaScript, HTML, Ionic, MySQL, SQLite.

Intermediate

Google Cloud services, Git, SCSS, Inkscape, MATLAB, VHDL, LabVIEW, Multisim, Mathematica, LaTeX, OpenOffice, MS Office.

Basic level

Django, R, C, VBA, AutoCAD, FreeCAD, SolidWorks.

Learning

Docker, Kubernetes.

Soft skills

Presentation & Public Speaking, Active Listening, Perseverance, Teamwork, Written & Oral Communication, Creative, Problem Solving, Negotiation, Flexibility, Honest, Proactive, Autodidact.

Certifications

Data analyst

Get trained for employment, Carlos Slim Foundation

Mexico City, Mexico

March 25, 2020

- Folio: v6k3s561f

JAVA SE 8 Programming
Educational organization CertificaTIC, S.C.

Mexico City, Mexico
January 26, 2019

- ID: 50478767

Scrum Fundamentals Certified
VMEdu, www.scrumstudy.com

Mexico City, Mexico
November 21, 2017

- ID: 600919

Courses

2nd. NETWORK SECURITY COLLOQUIUM
NATIONAL POLYTECHNIC INSTITUTE and Section of Postgraduate Studies and Research of ESIME, Zacatenco

Mexico City, Mexico
April 23-27, 2018

- 20 hours

1st. MOBILE COMMUNICATIONS COLLOQUIUM (5G)
NATIONAL POLYTECHNICAL INSTITUTE and Section of Postgraduate Studies and Research of ESIME, Zacatenco

Mexico City, Mexico
October 16-20, 2017

- 30 hours

INTRODUCTION TO THE DESIGN OF DIGITAL SYSTEMS WITH VHDL
Research, innovation, development and education in embedded systems and CBI UAM-I

Mexico City, Mexico
November, 2013

- 30 hours

LANGUAGE C BASIC LEVEL
Herman Hollerith Institute

Mexico City, Mexico
January, 1996

- 30 hours

Presentation

A FILTER MODEL FOR COMPLEX SYSTEMS
XIX International Symposium "Contributions of Universities to Teaching, Research, Technology and Development" (exposition)

Mexico City, Mexico
September 26, 27 and 28, 2018

Filter for complex systems on mobile devices
Academic activities of Expo ESCOM (poster)

Mexico City, Mexico
June 7 and 8, 2018

Mobile signal identification system
6th International Engineering Congress (CIMEEM) (poster)

Queretaro, Mexico
November 13-15, 2017

VIRTUAL INSTRUMENT TO MEASURE EVOCATED RESPONSES WITH A NEUROPACK SIGMA SYSTEM: STAGE 1
Exposition of the Biomedical Engineering Project at the XIX Symposium of the Department of Health Sciences Autonomous Metropolitan University (exposition)

Mexico City, Mexico
November 26-28, 2014