

Moises Perez
Software Engineer
MediExcel Health Plan, Tijuana, Mexico
mxpxgx@gmail.com
mobile: +52 1 (664) 188 2166

PROFILE

Moises Perez is a Software Engineer at MediExcel Heal Plan in Tijuana, Mexico. He holds a Master's degree in Computer Science (CICESE) and a Bachelor's degree in Computer Engineering (UABC). Perez has experience working as a Web and Mobile Software Developer (MediExcel, COLEF, CICESE) and as a Software Quality Assurance Engineer (Sony Baja California). Perez's main areas of interests are software engineering, data analysis and ubiquitous computing.

PROFESSIONAL EXPERIENCE

MediExcel Health Plan 2014 – present
Tijuana, Mexico
Software Engineer

- Analyzed, designed and developed applications related to medical records, insurance coverage, billing and reporting.
- Maintained and improved several pre-existing applications.
- Coordinated and mentored other developers.

El Colegio de la Frontera Norte (COLEF) 2012 - 2014
Tijuana, Mexico

Software Engineer - Research Data Analyst

- Developed different web software applications related to population and migration studies using test-driven practices.
- Helped in the design of an algorithm to estimate net migration in Mexican states based on the spatial distribution of population model by Andrei Rogers (1995).
- Extracted, analyzed and visualized data from Mexican census, administrative registries and other sources.

Sony Baja California, S.A. de C.V. (Sony Electronics, Inc.) 2007 – 2009
Tijuana, Mexico

Software Quality Assurance Engineer

- Assured software quality in Sony High-Definition TVs to prevent critical defects and bugs that may affect the final customer. Tested and verified software using test cases based on internal standards and specifications.
- Developed an automated testing system for On/Off TV tests.
- Developed testing plans and coordinated the work of 3 engineers and 10 testers.
- Reported and presented results to management from Tijuana, San Diego and Japan.

EDUCATION

Centro de Investigación Científica y Estudios Superiores de Ensenada (CICESE Research Center) 2009 – 2012

Ensenada, Mexico

MSc in Computer Science

Universidad Autónoma de Baja California (UABC) 2002 – 2007

Tijuana, Mexico

BSc in Computer Engineering

TECHNICAL SKILLS

- Programming languages: Python, Java, C, JavaScript.
- Mobile application development: Android.
- Web development frameworks: Django.
- Web technologies: HTML, CSS, JQuery, Sass (SCSS), D3.js.
- Database management systems: PostgreSQL, MySQL, Informix, SQLite3.
- Data Analysis: Pandas, NumPy, SciPy, Excel Macros (VBA), MATLAB/Octave.
- Others: SQL, GIT, TDD, ArcGIS, Quantum GIS, Adobe Photoshop & Illustrator.

KEY PROJECTS

Maintained and extended the functionality of the MediExcel System. I joined an abandoned development team at MediExcel Health Plan. At first, I was the only developer maintaining that software system. I enjoyed maintaining it and fixing several bugs left by the previous developers. I analyzed and developed different system modules related to medical records, insurance coverage, billing and reporting. The system was developed using the Django Framework (Python). MediExcel. Tijuana, Mexico. 2014-2015

Developed web applications related to population and migration studies as part of a research project funded by CONACYT and INEGI (institutes of the federal government). Helped in the design and implementation of an algorithm to estimate population and net migration between Mexican states using data from the national census, and administrative registries for births and deaths. Most of the system was developed in Python (Pandas, Django). Presented to high management from CONACYT and INEGI, and conducted a workshop about the usage of this system at INEGI's headquarters. COLEF. Tijuana, Mexico. 2012-2014

Analyzed, designed, implemented and evaluated InCense, a toolkit to facilitate contextual data gathering from a population of smartphone users. It includes a mobile application, a desktop application and a database. The mobile application was developed using the Android platform. This application stays running the programmed time, sensing and saving data from accelerometers, GPS, microphone, Wi-Fi, NFC and other "sensors". CICESE (master's project). Ensenada, Mexico. 2011-2012

Developed the test plan, and coordinated a SQA team for the MA2 project. Tested software in TVs for the MA1 project. Developed an automated test system for On/Off TV tests. Sony Baja California. Tijuana, Mexico. 2007-2008

ACADEMIC RELATED ACTIVITIES AND PUBLICATIONS

- L. Castro, J. Favela, E. Quintana, **M. Perez**. *Behavioral data gathering for assessing functional status and health in older adults using mobile phones*. Springer Personal and Ubiquitous Computing. 1617-4909. Sep 2014
- M. Perez**, L. Castro, J. Favela. *InCense: A research kit to facilitate behavioral data gathering from populations of mobile phone users*. 5th International Symposium on Ubiquitous Computing and Ambient Intelligence (UCAmI). Riviera Maya, Mexico. Nov 2011
- L. Castro, J. Favela, **M. Perez**, C. Garcia. *Work in progress: Opportunistic sensing for behavioral inferences in elder care*. IEEE Pervasive Computing. 10(4): 54-55. Oct 2011
- M. Perez**. *InCense: A research kit to facilitate behavioral data gathering from populations of mobile phone users* (Poster). 2nd Workshop on Ubiquitous Computing Uniting the Californias. Ensenada, Mexico. Mar 2011

TALKS AND TRAININGS GIVEN

- Gave a workshop on *ASNM: an algorithm to estimate net migration in federal entities from Mexico*. INEGI. Aguascalientes, Mexico. Feb 2014

INTERNSHIPS

- Teléfonos del Noroeste, S.A. de C.V. (TELNOR)** Oct 2006 – Jan 2007
Tijuana, Mexico (Software Developer Internship)
- Analyzed, designed and implemented an Automated Call System module focused on generating phone calls based on list of special customers.

ADDITIONAL TRAINING

- Machine Learning online course*. Stanford University through Coursera. Jun 2014
- OECD Innovative Approaches to Turn Statistics into Knowledge (iAsk) 2013* (seminar). INEGI. Aguascalientes, Mexico. Dec 2013
- "Database Usage of the (Mexican) Population and Housing Census 2010"*. INEGI. Tijuana, Mexico. Nov 2012
- "Query System of Statistic and Geographic Information by INEGI"*. INEGI. Tijuana, Mexico. May 2012
- Six Sigma Yellow Belt Certification*. Sony Baja California. Tijuana, Mexico. Sep 2007
- Digital Graphic Design course*. CETYS Universidad. Tijuana, Mexico. Sep 2006

PROFESSIONAL AFFILIATIONS

- Association for Computing Machinery (ACM).

GENERAL INFORMATION

- DOB: January 2nd, 1984
- Nationality: Mexican
- Languages: English (fluent) and Spanish (native).
- Personal traits: Analytical mind, responsible, adaptive, team- and detail-oriented professional.