JORGE IVÁN RODRÍGUEZ ECHEVERRÍA

Phone: (593) 9-949-42188
jirodrig@espol.edu.ec
Cdla. Alborada XI Mz 36 V6
Guayaquil, Ecuador 90112

EDUCATION

PhD Ghent University — May 2016 - Present
PhD computer science engineering
Student
Advisor: Sidharta Gautama, prof. dr. ir.

MS Escuela Superior Politécnica del Litoral — Dec 2012
Master in Management Information Systems
Thesis: "Designing methodology for data migration between critical applications in the Guayaquil's town hall"
Advisor: Lenin Freire, Msig.

BS Escuela Superior Politécnica del Litoral — Jul 2007
Computer engineer specialized in technological systems

TEACHING EXPERIENCE

Escuela Superior Politécnica del Litoral, Guayaquil, Ecuador — May 2008 to Apr 2016
Professor, Electric and Computing Engineering Faculty

- Taught Programming Fundamentals, an undergraduate course averaging 30 students per semester, covering the following topics: C Programming, structure programming, functions, arrays, libraries, pointers, characters and string, files. — May 2008 to Sep 2011
  Developed quizzes, exams, and homework.

- Taught Object Oriented Programming, an undergraduate course averaging 60 students per semester, covering the following topics: Java Programming, object-oriented programming, object-oriented analysis and design, user interface design. — Oct 2010 to Sep 2014
  Developed quizzes, exams, and homework.
  Checking the syllabus to cover accreditation standards
  Coordinated grading and labs with a team of 3 professors

- Taught Database Systems I, an undergraduate course averaging 20 students per semester, covering the following — May 2011 to Sep 2013

topics: modeling database, normalization, Transact SQL, PL/SQL
Developed quizzes, exams, and homework

- Taught Web Applications Development, an undergraduate course averaging 35 students per semester, covering the following topics: web standards, client-side and server-site programming, web architectures, web services, MVC model, state management, web security
  Developed quizzes, exams, and homework
  Checking the syllabus to cover accreditation standards
  Oct 2011 to Feb 2016

- Taught Data Structures, an undergraduate course averaging 30 students per semester, covering the following topics: data types, data structures: list, stack, queue, map, trees, graph.
  Developed quizzes, exams, and homework
  Checking the syllabus to cover accreditation standards
  Coordinated grading and labs with a team of 2 professors
  May 2013 to Feb 2016

Undergraduate Students Advised
Carla Salvatierra, Felix Rivas, "Social web application for labeling fragments of Youtube videos applying the concept of games with a purpose". Jul 24, 2013
Carla Hurel, Andrea Caceres, "Android application that used wi-fi technology to guide students to their classrooms in ESPOL". May 20, 2015

PROFESSIONAL EXPERIENCE

Inspector of Use Cases National System Public Finance (Contract Position)
ESPOLTECH, Guayaquil, Ecuador Nov 2013- Mar 2014
Description: The inspection was performed in order to detect and classify the different types of errors in the system requirement's definition, to correct them and performing the software measurement process.

Land Use System development (Contract Position)
M.I. Municipalidad de Guayaquil, Guayaquil, Ecuador 2012
Description: By this system, citizens can check their property's land use. The system was developed in ASP.NET and deployed at November 2012.
https://tramites2.guayaquil.gob.ec/usodesuelos/Consultas/SUS00001.aspx

Senior software developer (Contract Position)
M.I. Municipalidad de Guayaquil, Guayaquil, Ecuador 2008 - 2010
Description: Application Developer (Web and Windows) using .NET platform in Guayaquil's town hall.

PROFESSIONAL TRAINING

Machine Learning with Big Data
University of California, San Diego. Coursera. May 4th, 2017
Description: Design an approach to leverage data using the steps in the machine learning process. Apply machine learning techniques to explore and prepare data for modeling. Identify the type of machine learning problem in order to apply the appropriate set of techniques. Construct models that learn from data using widely available open source tools. Analyze big data problems using scalable machine learning algorithms on Spark.

Introduction to Big Data
University of California, San Diego. Coursera. March 21st, 2017
Description: Identify what are and what are not big data problems. Architectural components and programming models used for scalable big data analysis. Install and run a program using Hadoop.

Getting started with High-Performance Computing 2016
Ghent University, Belgium. Jun 2016
Description: Introduction to the UNIX command line, scripting and high-performance computing (HPC) as a stepping stone towards the use of computer clusters for solving advanced computation problems. Python scripting. Introduction to Python. Scientific computing with pylab: numpy, scipy and matplotlib and Jupyter Notebook

Data analysis tools
Wesleyana University, Coursera. Jun 14, 2016
Description: develop and test hypotheses, variety of statistical tests (ANOVA, Chi-Square, and Pearson correlation analysis), strategies to know how to apply them, use of statistical software packages (Python).

Data management and visualization
Wesleyana University, Coursera. Oct 12, 2015
Description: Manage, describe, summarize and visualize data, choose a research question based on available data and engage in the early decisions involved in quantitative research, describe variables and their relationships through frequency tables, calculate statistics of center and spread, and create graphical representations.

Microsoft SQL Server 2012 Business Intelligence
SIPECOM, Padre Aguirre / Malecón 2000, Guayaquil, Ecuador. Oct 12, 2015
Description: Creating ETL process using Integration Services, OLAP cubes using Analysis Services and reports with Reporting Services.

Geographic information systems and infectious diseases
Upstate Medical University and ESPOL. Ago 2014
Description: Using QGIS like tool to show cases of dengue on a map

Web applications development ASP.NET MVC4

SIPECOM, Padre Aguirre / Malecón 2000, Guayaquil, Ecuador. May, 2014

Android mobile applications
Microsoft Academy – ESPOL, ESPOL. Feb, 2013

LANGUAGES

English: Intermediate listener, speaker, reading and writing

Spanish: Native Language

Portuguese (BR): Advanced listener and speaker, intermediate reading and writing. Celpe-Bras Intermediate Certification, April 2014.

Dutch: Learning (beginner).

COMPUTER SKILLS

Programming: C#, Java, Python, ANSI C, ASP.NET, Transact-SQL, PL/SQL

Applications: Spyder, Microsoft Visual Studio, Matlab, MySQL, Netbeans

Platforms: Windows, Linux

REFERENCES

Dr. Ana Tapia, Miss.
Electric and Computing Engineering Faculty
Escuela Superior Politécnica del Litoral
Phone: +593-4-226-9800
Email: atapia@fiec.espol.edu.ec**;** atapia@espol.edu.ec

Dr. Carmen Vaca, Miss.
Electric and Computing Engineering Faculty
Escuela Superior Politécnica del Litoral
Phone: +593-4-226-9800
Email: cvaca@fiec.espol.edu.ec

Dr. Daniel Ochoa, Mr.
Electric and Computing Engineering Faculty
Escuela Superior Politécnica del Litoral
Phone: +593-4-226-9800
Email: dochoa@fiec.espol.edu.ec