Experience

Infosys Ltd, Monterrey, Nuevo León, Mexico

Systems Engineer, January 2013 to February 2015. Contractor for a Fortune 100 multinational banking and financial services corporation. Development, administration and support team for a global trade finance application used mainly in North America and Asia

- Coded and tested new agents/batch-jobs or new features of existing jobs in Java, C#, JavaScript and Windows Batch
- Designed and implemented a Windows Script Host script in JavaScript to retrieve scanned image and metadata files from the scanner workstations to our server and prepare for further processing
- Fixed approximately 350 incidents, including code bugs, development of new features, customers with invalid data in production and outages
- On-call primary contact for approximately 20 weeks
- Led approximately 30 Request For Change procedures, mainly to install code updates and to update data via SQL scripts
- Supported production and test environments for clients and other teams in the bank
- Knowledge management via documentation of known issues and fixes, to coach offshore resources

Center for the Development of the Software Industry, Monterrey, Nuevo León, Mexico. Software Engineer, October 2012 to January 2013

 Performed testing and quality assurance of an enterprise financial Web platform for a Mexican bank, implemented in Java Enterprise Edition and JavaScript

School of Physics and Mathematics at UANL, Monterrey, Nuevo León, Mexico Research Assistant (internship), August 2011 to February 2012

- Developed and maintained robust control systems software in MATLAB and Simulink
- Co-authored one published paper: Basin, M.; Serna, M.; Lopez-Hernandez, P.I., Central energy-to-peak filter design for uncertain linear systems, Control Conference (ASCC), June 2013

School of Mechanical and Electrical Engineering at UANL, Monterrey, Nuevo León, Mexico Laboratory Assistant (internship), February 2012 to August 2012

Supported students with Python, MATLAB and LabVIEW programming and electronics

Education

- Master of Information Engineering in Computer Science, 2015, Autonomous University of Nuevo León. Overall Grade 94.5/100.0
- Bachelor in Mechatronics Engineering, 2012, Autonomous University of Nuevo León, graduated with honors, Overall Grade 95.9/100.0

Computer Skills

- Languages: Python, JavaScript, C#, Java, HTML, CSS, Bash/UNIX Shell Scripting
- Data/Databases: Microsoft SQL Server, Oracle, MySQL, SQLite, JSON, YAML, XML
- Applications: Microsoft Visual Studio, Visual Studio Code, Git, Toad, Cygwin, Vim, GNU Make, OpenSSH
- Technologies: Node.js, Docker, Spring, Hibernate, Sphinx documentation tools, Jekyll
- Operating Systems: UNIX (Fedora, Ubuntu, Red Hat Enterprise Linux, Android), Microsoft Windows (Server 2003, XP, Vista, 7, 8, 10),
- Other: Linux user for eight years, proficient with UNIX command line interface, technical documentation writing, homebuilt computers enthusiast

Other projects

- ASPNET5CO: Advocacy and Community. Efforts to advocate the ASP.NET Core framework, http://pedroivanlopez.com/aspnet5co
- Data structures and algorithms in C#, https://github.com/lopezpdvn/DataStructuresAlgorithmsCSharp
- mazerob: Bluetooth-remote-control robot implemented with Java Virtual Machines on a PC and a Lego NXT Brick, http://pedroivanlopez.com/mazerob
- printer73x: A computer numerical control system for printing binary images, http://pedroivanlopez.com/printer73x