http://pedroivanlopez.com

Experience

Epicor Software Corporation, Monterrey, Nuevo León, Mexico

Software Developer, February 2017 - present. Custom Solutions Group, I mainly work on extending our base products to better fit the business requirements of customers in North and South America.

- Delivered the first mobile access dashboard solution of the Monterrey branch, a responsive HTML5 client with C#/.NET on the backend
- Developed 5 custom file formatters in C# for the ACH network and Positive Pay bank services
- Wrote T-SQL code generators in Python for data/schema definition and data querying
- Created 15 new forms/modules in C# for the Epicor ERP system version 10+

Self-employment, Freelance Consultant. 2015-2017.

Coached job applicants and students on computer science and software engineering topics.

• Published implementations of data structures, algorithms, and solutions to programming problems

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 for a global trade finance application used mainly in North America and Asia

- Coded and tested new agents/batch-jobs and features in Java, C#, JavaScript and Windows Batch
- Fixed 350 incidents, including code bugs, development of new features and data fixes
- On-call primary contact for 20 weeks, leading 30 *Request For Change* procedures in Production.

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 Python, MATLAB and Simulink
- Co-authored one published paper: Basin, M.; Serna, M.; Lopez-Hernandez, P.I., <u>Central energy-to-peak</u> <u>filter design for uncertain linear systems</u>, 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 in designing and troubleshooting programs in Python, MATLAB and LabVIEW

Computer Skills

- Languages: C#, Python, JavaScript, Java, (T-)SQL, HTML, Bash/UNIX Shell Scripting
- Data/Databases: SQL Server, Oracle, MySQL, SQLite, JSON, YAML, XML
- Applications: Vim, Visual Studio, Visual Studio Code, Git, Toad, Cygwin, OpenSSH
- Technologies: .NET, Infragistics, Java, Node.is, xUnit, Docker, Spring, Hibernate, Jekyll
- Operating Systems: UNIX (Fedora, Red Hat Enterprise Linux), Windows (Server 2003, XP, Vista, 7, 10)
- Design patterns: Dependency Injection, Object-Relational Mapping (ORM), Module, Factory method, Iterator, Reactor, Singleton

Education

- Master of Information Engineering in Computer Science, 2015, Autonomous University of Nuevo León. Overall Grade 94.5/100.0
- Bachelor of Engineering in Mechatronics, 2012, Autonomous University of Nuevo León, graduated with honors (*Mención Honorífica de Excelencia*), Overall Grade 95.9/100.0

Projects

- Software engineering problems in JavaScript https://github.com/lopezpdvn/software-engineering-problems-javascript
- Data structures and algorithms in C#, https://github.com/lopezpdvn/DataStructuresAlgorithmsCSharp