

Experience	<p>Epicor Software Corporation, Monterrey, Nuevo León, Mexico Software Developer, February 2017 - present. Custom Solutions Group, I mainly work on extending and adapting our base products to better fit the business requirements of customers in North and South America.</p> <ul style="list-style-type: none">• Reduced execution time of mass update by 90% by porting business logic from client to server, and by porting database access from Entity Framework to stored procedures in T-SQL• Highest billable utilization out of all engineers and architects of the Mexico CSG team in FY2019• One of the top 10 employees of the Epicor Monterrey branch in Q4 2019• Delivered the first mobile access dashboard solution of the Monterrey branch, a responsive HTML5 client with C#/.NET on the backend• Developed 16 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+• Led engineers in upgrading multiple product customizations from Epicor 10.1 to 10.2 <p>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</p> <ul style="list-style-type: none">• 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 <i>Request For Change</i> procedures in Production <p>Self-employment, Freelance Consultant. 2015-2017. Coached job applicants and students on computer science and software engineering topics.</p> <ul style="list-style-type: none">• Published implementations of data structures, algorithms, and solutions to programming problems <p>Center for the Development of the Software Industry, Monterrey, Nuevo León, Mexico. Software Engineer, October 2012 to January 2013</p> <ul style="list-style-type: none">• Performed testing and quality assurance of an enterprise financial Web platform for a Mexican bank, implemented in Java Enterprise Edition and JavaScript <p>School of Physics and Mathematics at UANL, Monterrey, Nuevo León, Mexico Research Assistant (internship), August 2011 to February 2012</p> <ul style="list-style-type: none">• 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., Central energy-to-peak filter design for uncertain linear systems, Control Conference (ASCC), June 2013
Computer Skills	<ul style="list-style-type: none">• Languages: C#, JavaScript, TypeScript, LINQ, Python, Java, (T-)SQL, HTML, Bash/UNIX Shell Scripting• Data/Databases: SQL Server, Oracle, XML, MySQL, SQLite, JSON, YAML• Technologies: .NET 4.7.2, Entity Framework 6, LINQ to Entities, LINQ to XML, Infragistics, Epicor Internet Component Environment (ICE SDK & ICE Tools), Java, Node.js, xUnit, Docker, Jekyll• Applications: Vim, Visual Studio, Visual Studio Code, Git, LINQPad, Toad, Cygwin, OpenSSH, WSL• Operating Systems: UNIX (Fedora, Red Hat Enterprise Linux), Windows (Server 2012, 10, 7, XP, Vista)• Patterns: Promises, Async/Await, Reactor/Callbacks, Dependency Injection, Object-Relational Mapping (ORM), Module, Factory method, Iterator, Singleton
Education	<ul style="list-style-type: none">• 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 (<i>Mención Honorífica de Excelencia</i>), Overall Grade 95.9/100.0
Projects	<ul style="list-style-type: none">• LeetCode Solutions, https://github.com/lopezpdvn/leetcode-solutions• Code snippets, https://github.com/lopezpdvn/snippets