

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 Mexican team in FY2019• Delivered the first mobile access dashboard solution of the Monterrey branch, a responsive HTML5 client with C#/.NET on the backend• Developed 12 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, Java, Node.js, xUnit, Docker, Jekyll• Applications: Vim, Visual Studio, Visual Studio Code, Git, LINQPad, Toad, Cygwin, OpenSSH• 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">• Software engineering problems in JavaScript https://github.com/lopezpdvn/software-engineering-problems-javascript• Data structures and algorithms in C#, https://github.com/lopezpdvn/DataStructuresAlgorithmsCSharp