

Experience	<p>Epicor Software Corporation, Monterrey, Nuevo León, Mexico Software Developer, February 2017 - present. Custom Solutions Group, mainly worked on extending our base products to better fit the business requirements of customers in North and South America.</p> <ul style="list-style-type: none">Delivered the first mobile access dashboard solution of the Monterrey branch, a responsive HTML5 client with C#/.NET on the backendDeveloped 5 custom file formatters in C# for the ACH network and Positive Pay bank servicesWrote T-SQL code generators in Python for data/schema definition and data queryingCreated 15 new forms/modules in C# for the Epicor ERP system version 10+ <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>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 BatchFixed 350 incidents, including code bugs, development of new features and data fixesOn-call primary contact for 20 weeks, leading 30 <i>Request For Change</i> procedures in Production. <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 SimulinkCo-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 <p>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</p>
Computer Skills	<ul style="list-style-type: none">Languages: C#, Python, JavaScript, Java, (T-)SQL, HTML, Bash/UNIX Shell ScriptingData/Databases: SQL Server, Oracle, MySQL, SQLite, JSON, YAML, XMLApplications: Vim, Visual Studio, Visual Studio Code, Git, Toad, Cygwin, OpenSSHTechnologies: .NET, Infragistics, Java, Node.js, xUnit, Docker, Spring, Hibernate, JekyllOperating 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	<ul style="list-style-type: none">Master of Information Engineering in Computer Science, 2015, Autonomous University of Nuevo León. Overall Grade 94.5/100.0Bachelor 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-javascriptData structures and algorithms in C#, https://github.com/lopezpdvn/DataStructuresAlgorithmsCSharp