Summary

Technology enthusiast and passionate full stack software developer offers 20 year experience with the entire SDLC, delivering intuitive and engaging UI designs with productive and effortless UX (sampled at [linkedin.com/in/alexpigida](https://www.linkedin.com/in/alexpigida/)).

Experience

Consulting in Toronto, ON

 RBC 2019/04 - 2019/07

• Implemented preliminary designs and front-to-back functionality for the new 2.0 version of the MoveSnap.com application (Angular 7, .NET Core):

* Added new as well as extended existing pages (i.e., components, modules, services, types, templates and styles) for the Angular 7 application to implement the required functionality,
* Designed and implemented CRUD end points on the back end RESTful Web API application,
* Added relevant tables, columns to the underlying PostgreSQL database.

• Worked on maintaining, bug fixing and design augmentations of an existing/in-production MoveSnap.com application (AngularJS, Node.js):

* Worked on the landing page of the AngularJS application,
* Accommodated new branding graphic assets without disrupting the existing functionality
* Implemented adaptive design feature of dynamically changing the layout to fit into all possible display form factors: from large desktop monitors to small mobile devices.

**Skills:** Angular 7, .NET Core, C#, RESTful Web API, PostgreSQL, GitHub, HTML, CSS, JS, TS, JIRA, Confluence.

 Nymi 2016/11 - 2019/02

• Responsible for C# .NET application development for the Windows platform in the predominantly embedded C/C++ shop.

• Pioneered Windows-10 style best practices for UI/UX to overcome the “battleship grey” complacency for the critical client-facing applications.

• Designed and implemented efficient cross-platform (managed C# to unmanaged C/C++) communication schemes.

• Prototyped, implemented and brought to production multiple applications (WPF, UWP, Web MVC and Angular, PWA, etc.) and services (RESTful Web API) representing the user-facing functionality of managing all aspects of the company’s unique always-on-authentication devices.

**Skills**: .NET, C#, XAML, MVVM, UWP, MVC, RESTful Web API, Angular 6, PWA, GIT, SSMS, MS SQL, JIRA, Confluence.

[Sciex](https://sciex.com/) Sciex 2016/03 - 2016/11

Worked on various tasks of maintaining, fixing and evolving to the next level Sciex OS - the company's flagship WPF application used for research in mass spectroscopy.

• Surrounded my coding undertakings with the safety net of the detailed unit as well as elaborate UI automation tests.

• Developed custom FIT (Framework for Integrated Testing) fixtures allowing UI automation HTML scripts to manipulate custom controls of the applications under question.

• Designed and implemented various smaller applications facilitating better performance/execution of the daily tasks of the local QA team.

**Skills**: .NET, C#, WPF, XAML, MVVM, WCF, VS2015, SQLite, MongoDB, SVN, JIRA, Confluence, TeamCity, FIT White.

**[](https://www.microsoft.com/en-us/store/p/buscatch/9nblggh5g5z1)** [AAVpro Ltd](https://www.microsoft.com/en-us/store/p/buscatch/9nblggh5g5z1) 2016/01 - 2016/02

Took a course on design and development for Universal Widows Platform (UWP). Implemented several apps, many of which have passed all the required certifications and made it to the Windows App Store, and now deliver up to the minute relevant info (incoming busses, rain, etc.) to my pocket and desktop.

**Skills:** UWP, .NET, C#, XAML, MVVM, WCF, VS2015, TFS.

[](https://www.bmo.com/) [BMO](https://www.bmo.com/) 2014/02 - 2015/12

Took a dev-lead role on a green-field project – OLP (Obligor Linking Project) – where I designed and implemented:

• Rich client and web applications for various business tasks around the OLP project: from lightning-fast user datalink console to a multi-stream data acquisition (DAQ) tool with visual and intuitive orchestration front.

• Pioneered creative application of DNA sequencing techniques to the project’s problems resulting in 85% reduction of manual drudgery and seven-fold productivity increase.

• RESTful Web API service layer to serve the needs of the OLP project's distributed applications.

• MVC web application for a quick processing of To-do lists in the approval workflow spread across multiple departments.

• Custom Reporting System for distributing key indicators of daily DAQ runs to the involved parties through the internal email and web-client pathways.

Contributed code, designs, ideas, extensions, behaviors to [EPCatalyst](http://www.eikospartners.com/epcatalyst) – a Silverlight-based platform widely utilized at the bank.

On top of my daily developer’s duties, administered Microsoft Windows Server.

**Skills**: .NET, C#, WPF, MVVM, MVC, ASP.NET, RESTful Web API, JSON, HTML, CSS, JS, Silverlight, VS2015, SSMS, T-SQL, MS SQL, Oracle, Entity Framework, ADO.NET, Windows Service, Agile Methodology, SVN, TFS.

[mobileLIVE - EmergiTEL Group](https://www.mobilelive.ca/#/) mobileLIVE - EmergiTEL Group 2013/10 - 2013/12

Lead design and implementation of a Microsoft Lync messenger extension – a model application serving as a proof of concept demonstrating aggregate capabilities spanning several mobile technologies:

• Created responsive UI/UX relying on async and await keywords as well as the TPL (Task Parallel Library) constructs.

• Coded comprehensive C# API layer to the Unmanaged C++ assembly.

• Introduced smooth transitions and animations to the application’s UI. Seamlessly embedded all graphical assets representing the product’s brand into the otherwise bare controls and backgrounds.

• Authored Visual Studio code snippets which increased fidelity and speed of coding the MVVM design pattern.

**Skills**: VS2012, .NET 4.5, C#, C++, WPF, MVVM, LINQ, Agile Methodology.

[Livingston International](https://www.livingstonintl.com/) Livingston International 2013/02 - 2013/09

Worked on design and implementation of a rich client application using latest advances in the WPF/WCF/MVVM technologies and frameworks.

• Drastically improved the application’s UI templates; reduced to the minimum the efforts of the end users in their daily use of the application.

• Aggregated multi-screen/multi-step laborious business processes into an efficient and streamlined single-page experiences with clean intuitive designs, smooth animated transitions, rich custom tooltips/mouse-overs and such.

• Reduced development time for the existing data access layer as well as streamlined data flow to/from the back end databases without disrupting the current architecture of the application.

• Cleaned up the MS SQL databases from obvious (and not) design imperfections.

• Designed sophisticated reports using Microsoft SSRS as well as in-house developed custom tools.

• Designed and implemented an Event Subscription Management system featuring single page design manipulating a complex multi-level hierarchy of entities.

**Skills**: .NET, C#, MS SQL, SSMS, T-SQL, WPF, MVVM, LINQ, Entity Framework, Agile Methodology.

[](http://www.citigroup.com/canada/en/) Citi 2012/10 - 2012/12

As a part of an intercontinental (Toronto-London-New York) team, worked on a high-performance/high-throughput trading platform – a WPF application based on a MVVM design pattern, with highly configurable/customizable plug-in architecture.

• Worked on implementation of a real-time reporting system aimed at sub-second delivery and highlighting of different parameters of trading analytics data torrents: color/style-coded alerts, custom filtering, data driven triggers of action logic, etc.

• Engaged TPL (Task Parallel Library) to keep the UI/UX alive and responsive.

• Developed custom-tailored configuration infrastructure, targeted at dynamic reflection-based type instantiation and at integration with the end user preferences and corresponding clever defaults. Designed UI components providing the best user experience manipulating and fine-tuning the user preferences.

• Tamed idiosyncrasies of the third-party components irrevocably integrated into the application.

**Skills**: .NET, C#, WPF, MVVM, LINQ, Entity Framework, SVN, Infragistics, Agile Methodology.

 Global Financial 2011/11 - 2012/08

* Designed and implemented several LOB applications:
  + Electronic RESP Enroller:
    - A daring replacement for the traditional paper-based enrollment process with the modern mobile Android tablet-based approach to register new applicants faster and with fewer errors.
  + Mobile RESP Calculator:
    - A tool to support the previous app by providing a quick and easy way to establish the right financial strategy for achieving the best results, facilitating quick navigation through a complex set of rules, regulations, starting conditions and ultimate goals,
    - Engaged ubiquitous modern mobile computing revolution to serve business needs,
    - Enabled touch friendly features using Android’s built-in HTML5 support,
    - Designed unique and appealing look and feel for the front end of the app with rich and intuitive functionality at one’s fingertips (sampled at linkedin.com/in/alexpigida),
    - While the analyst team had been busy with specs gathering, created the app’s prototype on 4 platforms: WPF, Silverlight, native Android and MVS, targeting mobile as well as desktop hardware.
    - “Outsourced” time-consuming complex computations to the non-UI threads using TPL (Task Parallel Library).
* Facilitating globalization and multi culture support in the MVC apps, created a tool automating translation of the whole UI to a language of choice using Microsoft Translator API. Also, added a feature automating the process of manual error correction by the non-developer language experts.
* Took ownership over the lack of a suitable task tracking tool problem and created a system featuring:
  + Creation, assignment, progress tracking and lifecycle management of the projects and tasks of the IT shop (TPM – Task/ Project Manager),
  + Mission Control Center: a UI featuring an executive view which with a single glance reflects the overall health of all the projects at hand as well as real-time delivery date forecasting component,
  + Multi-tasking component: facility for fast switching between tasks with automatic real-time time tracking,
  + Integration with the local TFS: establishing a link between jobs submitted to TFS and corresponding tasks for documenting, invoicing and accountability purposes.
* Designed and implemented a corporate screen saver featuring:
  + Animated gauges presenting corporate performance counters,
  + Unread email notifier/counter,
  + Integration with the task tracking system,
  + Optional local traffic and weather gadgets.

**Skills:** VS2010, .NET 4.0, C#, VB.NET, WPF, Silverlight, WCF, MVC, ASP.NET, HTML5, JavaScript, jQuery, HTML, CSS, JS, MS Access, T-SQL, SSMS, LINQ to SQL, Entity Framework, AJAX, TFS.

[Toromont CAT](http://www.toromontcat.com/) Toromont 2010/06 - 2011/11

Back to Toromont to continue working on a vast code base of the existing corporate apps ranging from the classic ASP to the latest advances in dev technologies, including ASP.NET 4.0, Silverlight and WPF, reinforced with hardcore T-SQL and third-party components.

• Designed and implemented a rich client application (WPF) for a quick and highly automated entry into the local time tracking system, integrated with TFS as well as click-once timesheet/invoice creation, review and printing. Introduced pleasing looks as well as innovative and productive experience to the otherwise tedious drudgery of keeping track of one’s work (sampled at www.linkedin.com/in/alexpigida). Result: 10 man-hour daily saving for the team.

• “Gamed” several aspects of the existing time tracking process, turning the drudgery into a fun activity which resulted in a significant financial data latency reduction as well as savings of about 5 man-hours per day for the whole department.

• Designed sophisticated reports using Microsoft SSRS.

• With extreme care and surgical precision extended the intricate and complex codebase of existing classic ASP as well as the latest ASP.NET applications along with the enormous T-SQL scripts.

• Ported existing classic ASP applications into ASP.NET 4.0 web form as well as Silverlight apps.

**Skills:** VS2010, .NET 4.0, C#, WPF, WCF, Silverlight, RIA, jQuery, HTML, CSS, JS, SSRS, SSMS, T-SQL, LINQ to SQL, Entity Framework, ASP.NET, ASP, AJAX, TFS.

**[CWB Group](https://www.cwbgroup.org/)** CWB Group 2009/10 - 2010/05

• Implemented rich client application front end (WPF) as well as plumbing to and design of the back-end SQL server databases.

• Ported a set of legacy applications to the latest platforms: WPF and .NET 4.0.

• Used early Beta bits of TPL (Task Parallel Library) to “defreeze” the application during long and lengthy SQL queries and server calls.

• To soften the impact of the current and future codebase growth, implemented a safety net of numerous unit tests for the existing corporate applications.

**Skills:** VS2010, .NET 4.0, C#, WPF, XML, MS Access, T-SQL, SSMS, Citrix, TFS.

[Green Shield Canada ](http://www.greenshield.ca/en-ca) Green Shield Canada 2008/12 - 2009/08

• Participated in an effort of bringing current corporate code base of numerous web applications to the latest versions of core software libraries and contemporary security standards.

• Carried out functional refactoring of common assemblies used by multiple corporate web applications for the purpose of utilizing the latest secure technologies (SSO by AD FS and Code Access Security).

• Introduced latest coding effort-saving trends in software development, such as Dependency Injection and Unity Application Block of Microsoft Enterprise library.

• For the purpose of smoothing out the current and future software enhancements, implemented a safety net of numerous unit tests for the existing corporate applications.

**Skills:** VS2008, .NET 3.5, C#, ASP.NET, HTML, CSS, JS, WebForms, XML.

[Toromont CAT](http://www.toromontcat.com/) Toromont 2008/02 - 2008/11

• Using emerging geo-coding technologies (Microsoft Virtual Earth and Google Earth) prototyped a GPS-based asset tracking demo application facilitating comparison of fuel expenses between different equipment delivery scenarios.

• Capitalizing on extremely advanced user base, created a prototype of a WebParts-based dashboard application in which users can tailor layout and functionality of web pages in accordance to their unique needs, thus saving the development team from creating, maintain and supporting numerous flavors of essentially the same application.

• Introduced and prototyped an idea of a visual aggregation custom web control: graphically compacting more relevant information into a common chart using latest advances in web presentation technology (Silverlight).

• Designed and implemented a new internal web application, extending the internal corporate application framework with the latest web technologies.

**Skills:** VS2008, .NET 3.5, C#, VB.NET, WinForms, WebForms, ASP.NET, HTML, CSS, JS, classic ASP, AJAX, WPF, Silverlight, Web Services, XML, T-SQL, OOP, ORM, NHibernate, MS Virtual Earth, Google Earth, TFS.

**[BDO IT Solutions (former Systemgroup Inc.)](https://itsolutions.bdo.ca/systemgroupinc/)** Systemgroup Consulting Inc. 2007/02 - 2008/01

• Participated in a full development life cycle of Mutual Funds Connect application for the Meridian Credit Union – a centralized information management tool that facilitates financial planning lifecycle administration and provides a seamless interface to the Wealth Management service delivery framework.

• Worked on the front end of the application – a rich smart client using the latest advances in UI development – Windows Presentation Foundation (WPF).

• Prototyped business process flow between front and back offices using Widows Workflow Foundation (WF).

• Designed and implemented a custom business rule engine – a web service application providing metadata dependent on multidimensional set of incoming conditions pertaining the financial transaction at hand.

• Came up with an idea and implemented an application loading up the business rule engine with thousands of combinations translated from free form documentation describing the business process.

**Skills:** VS2008, .NET 3.5, C#, WPF, WF, WCF, VB.NET, WinForms, Smart Client, Web Services, XML, XPATH, T-SQL, WSDL, OOP, TFS.

**[Direct Energy](https://www.directenergy.com/)** Direct Energy 2006/09 - 2007/02

• Using SharePoint Server 2007 and WebParts of ASP.NET, devised a way to separate business logic development from graphic design and multilingual content support.

• Designed and developed a series of custom components for customers’ sign up and sign in to the corporate website.

• Enhanced existing customer enrollment web application (a part of www.directenergy.com site) by introducing mid-tier components reflecting new business rules added to the process.

• Implemented an assembly of components with WinForm .NET 2.0 front end responsible for staging data of various formats from company’s legacy systems to MS SQL Server databases.

• Implemented an internal support application for simple and efficient bulk editing of highly volatile data associated with company’s market penetration.

**Skills:** VS2005, ASP.NET 2.0, C#, VB.NET, WinForms, WebForms, Web Services, XML, T-SQL, DTS, SharePoint Server, SOA, WSDL, OOP.

**[Magna Cosma International](http://www.magna.com/)** Magna International 2005/11 - 2006/07

• Took technical lead on late stages of a project of conversion from Lotus Notes to a modern ASP.NET 2.0 business workflow application.

• Designed and implemented rich, responsive and intuitive UI using ASP.NET WebForms, AJAX technology and third-party web control libraries (Infragistics, Skelta, etc.)

• Refactored the existing complex business tier into OO hierarchy of reusable and extensible types.

• Redesigned existing disparate data code pieces into a flexible and reusable data access component.

• Developed a WinForm .NET 2.0 application for fast and efficient bug tracking, featuring automated email-based notification of assignees and real-time progress reporting capabilities.

• Automated process of converting business process specs into executable business logic by writing software capable of processing company’s documentation.

• Optimized T-SQL code to outperform existing means of data handling by two orders of magnitude.

**Skills:** VS2005, ASP.NET 2.0(1.1), C#, VB.NET, WinForms, WebForms, Web Services, XML, T-SQL, ORM, NHibernate, SSMS, DTS, Excel, SOA, WSDL, OOP, IIS.

**[ThoughtCorp](https://www.epam.com/)** Thoughtcorp 2005/04 - 2005/10

• In a capacity of a senior .NET developer, participated in several projects concerned with high volume customer billing and payment systems for Bell Canada.

• Designed and implemented numerous ASP.NET WebForms with underlying middle tier C#-based business objects as well as data processing scripts for Oracle database using PL SQL.

• Exposed business logic and data to the non-.NET clients in a platform neutral manner using Web Services.

• Provided real-time bug fixing of the existing code with surgical precision, which reduced to minimum need for regression testing.

• Stepped up with the initiatives of providing a set of WinForm-based tools for code generation and code conditioning which saved hundreds of man-hours for the team at the crunch time; as well as redesigned the existing middle-tier code to a better performing and easier to maintain components using OOP methodology.

• Managed to satisfy simultaneously 3 managers on 3 concurring projects.

• Regularly completed my assignments in a fraction of the time allocated for the tasks.

**Skills:** ASP.NET 1.1, C#, VB.NET, WinForms, WebForms, Web Services, XML, PL SQL, Oracle, Excel, SOA, WSDL, OOP, IIS.

**[Arbor Memorial](https://www.arbormemorial.ca/en/)** Arbor 2004/08 - 2005/04

• Designed and implemented a standalone multithreaded .NET WinForm application which asynchronously decoded instructions from MS Word documents and performed scheduled de-normalization and data transfer from a production OLTP SQL server to various reporting non-SQL clients based on the decoded instructions.

• Helped to roll out a multimillion project on time by implementing various ASP.NET WebForms, providing quick bug fixes and careful bug-free implementation of the last minute modifications.

• Refactored and optimized poorly performing middle-tier components as well as improved existing design and reduced amount of code by employing OOP methodology.

**Skills:** .NET, C#, WinForms, WebForms, MS Office Automation, XML, T-SQL, DTS, FoxPro, MS Access, ASP.NET, IIS, MS SQL Server, OOP.

**BMO** BMO 2003/04 - 2004/07

• Participated in one of the largest .Net project: $25,000,000 budget, several million lines of code, and at the same time record-breaking completion time.

• Rendered numerous specs and design documents into tens of thousands lines of code.

• Designed and implemented a number of key components of the application: a reflection-based attribute driven cross-tier dataflow and mapping system, which reduced tenfold amount of code to write, test and maintain; jet form printing components; numerous WinForms and business tier components.

• Employed several key aspects of extreme programming and OOP methodologies, which helped speed up development process and reduced time of consequent regression testing to a minimum.

**Skills:** .NET, C#, WinForm, XML, WSDL, SOA, OOP.

**[CSG](http://www.csgi.com/)** CSG 2003/02 - 2003/04

• Participated in developing a LAN-based security system aimed at fast and fault tolerant notification of various external events to designated monitoring stations on the network.

• Designed and implemented a .NET-based WinForm application – an administrative tool for setting up variety of interconnected RF and IR devices and orchestrating their activity.

• Employed object-oriented methodology to resolve complexity of the task; applied the Memento software pattern to capture and externalize the objects’ internal states without violating encapsulation.

**Skills:** .NET, C#, VB.NET, WinForm, XML, T-SQL, MS Access, OOP.

**[Arbor Memorial](https://www.arbormemorial.ca/en/)** Arbor 2002/03 - 2003/01

• Provided with .NET expertise as well as participated in implementation of a large-scale WebForm based contract management and accounts receivable system.

• Seized the initiative to introduce Microsoft-recommended coding standards along with .NET best coding practices to the team of developers from IBM.

• Employing OOP methodology, enhanced the application design which reduced coding volumes by one order of magnitude as well as improved maintainability and extensibility.

• Designed and implemented a .NET-based WinForm solution to stage data of enormous size and inexplicable complexity from legacy data systems to MS SQL database.

• Performed various tasks of fixing and upgrading company’s existing software as well as designed various helper WinForm utilities for everyday accounting needs of the office.

**Skills:** ASP.NET, C#, COM+, XML, T-SQL, DTS, FoxPro, MS Access, MS SQL, IIS, OOP.

Experience

Other

[Cetaris Home](https://www.cetaris.com/)

Education

**Microsoft Official Curriculum courses, Developmentor advanced classes 2001/05**

• Microsoft Certified Professional (MCPS)

• Microsoft Certified Solution Developer (MCSD), Visual C++ and SQL Server tracks

**University of Kiev, UA**

• Master of Science in Quantum Radiophysics and Electronics

Technologies Mastered

.NET, UWP, WPF, Silverlight, Angular, MVVM, ASP.NET, MVC, C#, XAML, T-SQL, Windows Workflow Foundation, Microsoft Visual Studio, WCF, Web Services, RIA Services, RESTful Web API, WinForms, WebForms, Entity Framework, ORM, NHibernate, jQuery, JSON, AJAX, HTML, CSS, JS, Microsoft Virtual Earth, Google Earth, C/C++, PL SQL, DTS, ADO.NET, IIS, VB.NET, VB6, UML, Visio, SharePoint, RAD of multi-tier applications, XML, SOAP, WSDL, Win32, ATL, MFC, VBScript, JavaScript, COM/DCOM, COM+, MTS, HTML, DHTML, SOA, OOP, ODBC, Oracle, MS Access, MS SQL, SSMS, SSRS, SSIS, PowerShell, Crystal Reports, MS Office Automation, Git, Visual Source Safe (VSS), Team Foundation Server (TFS), SVN, JIRA, Confluence, Bitbucket, Windows Service, Azure, SQLite, MongoDB.