Full-Stack Software Engineer

Stack Software Engineer

Discover the craftsmanship of Alex, *Full-Stack Maestro*, with 20+ years of proven success in entire SDLC and developing great UI/UX for desktop, web, and mobile applications. Tech enthusiast and skilled developer, I deliver cutting-edge, user-friendly enterprise applications that cater to diverse needs. With a flair for intuitive, responsive design, I enhance accessibility and functionality, ensuring a frictionless user experience. Known for problem-solving and client-focused solutions, I push technology to its limits to ensure demonstrable impact.

Objective

Aiming to secure a hands-on role, leveraging my expertise in crafting impactful applications and sophisticated solutions that exceed business requirements at hand, while significantly enhancing the user experience.

Technical Proficiencies

* **Programming Languages:** C#, C/C++, JavaScript, TypeScript, VB.NET, VB6, Python, PowerShell.
* **Frameworks & Libraries:** .NET, ASP.NET, MVC, Razor, WPF, UWP, Blazor, MAUI, Angular, ReactJS, jQuery, Entity Framework (EF), NHibernate, Bootstrap.
* **Databases:** MS SQL, PostgreSQL, MongoDB, SQLite, Oracle, Azure SQL DB, SSMS, SSRS, SSIS
* **Tools & Platforms:** Microsoft Visual Studio, Git, GitHub, VSS, TFS, SVN, Bitbucket, Azure DevOps, Azure Cognitive Services, Azure Web Hosting, JIRA, Confluence, TeamCity, FIT White
* **Other Skills:** TDD, DDD, TPL, XML, SOAP, WSDL, Win32, ATL, MFC, COM/DCOM, COM+, MTS, OOP, Crystal Reports, MS Office Automation, Google Earth, Microsoft Virtual Earth, PL SQL, DTS, ADO.NET, IIS, UML, Visio, Windows Service, ETL, CI/CD, Agile Methodology

Projects & Consulting Experience

A logo with colorful squares

Description automatically generated PwC *Full-stack Developer* 2024/03 – 2024/06

Contributed to the development of a .NET Web API application originally architected prior to joining the project, translating complex income tax calculations from Excel specifications into optimized and clear C# code, increasing computation efficiency and accuracy.

* **Enhanced Code Quality:** Identified and rectified design pattern violations and other architectural flaws within the project, improving overall code stability and maintainability.
* **Innovated Tools:** Created a standalone WPF desktop application as a license-free alternative to Postman, significantly speeding up integration testing of Web APIs currently in development.
* **Rapid Bug Resolution:** Expertly diagnosed and resolved bugs, identifying root causes with efficiency and applying solutions that adhered to established architectural and design patterns, ensuring the seamless functionality of the application.
* **Creative Use of Skills:** Designed an app to organize table tennis enthusiasts into self-managing teams. Initially a WPF desktop app, it was later ported to UWP, MAUI, Angular, and Blazor, hosted on Azure for cross-platform access.

*Skills:* .NET 8.0, C#, Azure, MS SQL, UWP, Angular, MAUI, Blazor, WPF/XAML, EF Core.

A blue and yellow logo

Description automatically generated RBC CM *Back-end Developer* 2022/12 – 2023/12

Refined the company’s core trade support application and designed a set of new smaller standalone desktop apps.

* Demonstrated surgical precision in bug fixing and new business logic implementation to ensure the smooth functioning of the flagship application that manages trade processes in the backbone servers of RBC.
* Streamlined various in-house chores by developing original standalone applications, incorporating modern UX styles and leveraging the latest advancements of the .NET platform.
* Recognized for my innovative approach in designing a one-click symmetrical permission editor, as well as for enhancing the user experience of widely used in-house applications.
* Ported my Microsoft Teams ChatGPT bot into a standalone automated WebEx client.

*Skills:* WPF/XAML, .NET 8.0, C#, TDD, TPL, Azure, XML, XSLT, MS SQL, EF Core, ETL, GPT-4.

CI Financial logo CI Financial *Full-stack Developer* 2021/01 – 2022/10

Led the design and development of new applications and refined existing ones, bolstering team productivity with innovative tools.

* Expertly utilized .NET 6.0 (XAML, C#) / MS SQL stack for designing and implementing two green-field desktop applications using Clean Architecture and DDD principles:
  + RIF-LIF Payment Calculator/Scheduler – 100x accelerator/replacer of the old Excel-based solution,
  + Database Process Launcher/Manager – innovation in action.
* Automated artifacts’ deliveries with a brand-new Azure's DevOps CI/CD pipeline.
* Boosted team efficiency by developing operational support apps, leveraging ChatGPT's conversational AI for real-time log analysis and a Microsoft Teams bot integration.
* Resolved bugs within the existing suite of local enterprise back-end applications.

*Skills:* WPF/XAML, .NET 6.0, C#, TDD, DDD, TPL, MS SQL, EF Core, ETL, Azure DevOps, CI/CD, GPT-3.5.

A picture containing graphical user interface

Description automatically generated Iress *Full-stack Developer* 2019/11 - 2020/11

Diligently maintained and enhanced Iress Pro, the company's premier professional trading platform, with a focus on resolving bugs and developing critical improvements.

* Streamlined data flow between Iress and external clients by developing rich-UI and pure backend apps.
* Resolved highly contested RDP server access with a clever software solution (WPF + Named Pipes).
* Centralized artifacts’ deliveries with a dedicated Azure's DevOps CI/CD pipeline.
* Engineered a real-time system for monitoring backbone processes and alerting on critical events.

*Skills:* ReactJS, C#, .NET Core, WPF, TDD, WCF, MS SQL, EF Core, ETL, GitHub, HTML, CSS, JS, TS, Azure DevOps

 RBC *Full-stack Developer* 2019/04 - 2019/07

Crafted and integrated [www.MoveSnap.com](http://www.MoveSnap.com)'s full-stack features using Angular, .NET Core, Repository and Unit of Work design patterns. Designed the underlying PostgreSQL database schema.

* Developed an adaptive design feature that dynamically adjusts the layout to accommodate all display sizes, ranging from large desktop monitors to small mobile devices.
* Revamped the MoveSnap.com landing page with fresh branding and better scalability.
* Improved MoveSnap’s backend by designing and adding the relevant CRUD RESTful API end points.

*Skills:* Angular, ASP.NET Core, C#, MVC, Razor, DDD, TPL, RESTful API, PostgreSQL, GitHub, CSS, HTML, TS.

 Nymi *Full-stack Developer* 2016/11 - 2019/02

Led C#/.NET app development in the predominantly embedded C/C++ shop; modernized client-facing tools by employing Windows 10 UI/UX best practices to address the dated "battleship grey" style. Streamlined cross-platform communication protocols for improved interoperability.

* Spearheaded the design and development of a comprehensive suite of web, desktop, and mobile applications, as well as user-centric services for the company’s unique always-on authentication devices. This initiative significantly enhanced the company's product ecosystem and user experience.
* Engineered a counterintuitive two-way communication method between devices, connecting managed C# and unmanaged embedded C/C++ without polling, thereby conserving battery and CPU resources.
* Prototyped, implemented, and brought to production multiple mobile, desktop and web apps (WPF, UWP, PWA, ASP.NET MVC and Angular, etc.) and services (RESTful API) representing the user-facing functionality for managing all aspects of the always-on-authentication devices.

*Skills:* .NET, C#, C/C++, XAML, MVVM, ASP.NET, MVC, Razor, TDD, DDD, TPL, RESTful API, Angular, UWP, PWA, SSMS, MS SQL, EF, HTML, CSS, JS, TS, Bootstrap.

[Sciex](https://sciex.com/) Sciex *Front-end Developer* 2016/03 - 2016/11

Maintained, fixed, and evolved company’s flagship WPF application for mass spectroscopy research, securing the progress with extensive unit and UI automated testing for enhanced stability.

* Customized Framework for Integrated Testing (FIT) fixtures to manipulate controls and allow UI automation HTML scripts in applications.
* Implemented comprehensive test coverage through robust unit tests and advanced UI automation, significantly enhancing code reliability and reducing regression risks.
* Enhanced the efficiency of the local QA team by developing several QA automation/helper applications.

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

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

Developed rich client and web applications for the Obligor Linking Project (OLP) project, including a datalink console and multi-stream data acquisition tool (DAQ) with an intuitive orchestration UI. Significantly contributed to the evolution of EP-Catalyst, a Silverlight-based platform widely used within the bank.

* Served as Development Lead guiding the creation of advanced applications for the OLP project.
* Creatively applied DNA sequencing algorithms, specifically the ***Levenshtein Distance***and***Jaccard Similarity Coefficient***, to streamline data cleaning procedures resulting in an astounding 85% decrease in manual tasks.
* Implemented a WCF REST service layer to meet OLP project’s distributed application needs.
* Streamlined interdepartmental approvals with a ASP.NET MVC web app that expedited To-do list processing.
* Developed a custom reporting system that delivers daily DAQ run updates via email and web-client notifications.
* On top of my daily developer’s duties, I administered Microsoft Windows Server.

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

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

 Global Financial *Full-stack Developer* 2011/11 - 2012/08

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

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

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

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

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

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

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

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

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

**BMO** BMO *Full-stack Developer* 2003/04 - 2004/07

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

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

[Cetaris Home](https://www.cetaris.com/) Cetaris *Full-stack Developer* 1995/05 - 2002/02

A blue and white bus with a digital clock

Description automatically generated [AAVpro Ltd](https://www.microsoft.com/en-us/store/p/buscatch/9nblggh5g5z1) *Mobile Developer* 1996/04 - 2016/03

**UkrAlko** UkrAlko *Head of IT* 1992/04 - 1994/11

**Ukrainian Academy of Sciences** *Staff Scientist* 1987/06 - 1992/05

Education

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

• Microsoft Certified Professional (MCP)

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

• Universal Windows Platform (UWP) Application Development

**Taras Shevchenko National University of Kyiv, UA**

• Master of Science in Quantum Radiophysics and Electronics

Links

**LinkedIn** [**https://www.linkedin.com/in/alexpigida**](https://www.linkedin.com/in/alexpigida/)

**GitHub** [**https://github.com/alexpisquared**](https://github.com/alexpisquared)

**Portfolio https://alexPi.ca** **/#/designs**