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...

…Also, avid professional hobbyist with passion

for developing practical daily-use applications, including apps for revenue/time tracking, taxes, crowd control, weather-based planning, and tutorial games for kids, transforming chores into enjoyable experiences

(sampled at [www.alexPi.ca](http://www.alexPi.ca)).

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

.NET, WPF, UWP, Blazor, MAUI, ASP.NET, MVC, Razor, MVVM, C#, C/C++, XAML, GPT-4, T-SQL, Microsoft Visual Studio, WWF, WCF, Web Services, RESTful API, RIA Services, WinForms, WebForms, Silverlight, Entity Framework (EF), ORM, NHibernate, JSON, AJAX, HTML, CSS, JS, Angular, ReactJS, jQuery, Google Earth, Microsoft Virtual Earth, PL SQL, DTS, ADO.NET, IIS, VB.NET, VB6, UML, Visio, SharePoint, TDD, DDD, TPL, XML, SOAP, WSDL, Win32, ATL, MFC, VBScript, JavaScript, COM/DCOM, COM+, MTS, OOP, PowerShell, Crystal Reports, MS Office Automation, Git, GitHub, VSS, TFS, SVN, Bitbucket, Windows Service, Azure Cognitive Services, Azure CI/CD, DevOps, Azure SQL DB, Azure Key Vault, Azure Web Hosting, MS SQL, ODBC, Oracle, SQLite, MongoDB, MS Access, SSMS, SSRS, SSIS, ETL, JIRA, Confluence.

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 *Full-stack 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, UWP, Angular 16, MAUI, Blazor, 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 local code repository deliveries with a brand-new Azure's 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 CI/CD, DevOps, 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 headless backend apps.
* Resolved highly contested RDP server access with a clever software solution (WPF + Named Pipes).
* Engineered a real-time system for monitoring logs and alerting on critical backbone process activities.

*Skills:* ReactJS, .NET Core, .NET 5.0, WPF, TDD, TPL, WCP, C#, MS SQL, EF Core, ETL, GitHub, HTML, CSS, JS, TS.

 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.

* Designed and kickstarted development for a range of web, desktop, and mobile apps, along with user-centric services for always-on-authentication devices.
* Developed an OCR component using Azure Cognitive Services to automate and streamline the enrollment process, eliminating the need of the manual data entry of the band serial number.
* 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 company’s unique 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.

[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.
* Surrounded my code with the safety net of the elaborate unit as well as UI automation tests.
* 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