

**Profile of**

**ALEX PIGIDA**

Mr. Pigida is a Full-Stack Maestro with over 20 years of proven success across the entire SDLC. Specializing in developing outstanding UI/UX for desktop, web, and mobile applications, Alex is a tech enthusiast and skilled developer who delivers cutting-edge, user-friendly enterprise applications to meet diverse needs. With a talent for intuitive and responsive design, Mr. Pigida enhances accessibility and functionality, ensuring a seamless user experience. He has a good understanding of **WCAG standards**, enhanced by completion of AODA training. Renowned for problem-solving and client-focused solutions, he pushes technology to its limits to deliver demonstrable impact. Mr. Pigida holds a Master of Science Degree in Quantum Radiophysics and Electronics. He also holds Microsoft Certified Professional (MCP), Microsoft Certified Solution Developer (MCSD) designations, among many others.

Mr. Pigida is an avid professional hobbyist with a passion for creating practical daily-use applications. These include apps for revenue and time tracking, taxes, crowd control, weather-based planning, and tutorial games for kids, transforming everyday chores into enjoyable experiences.

**Security Clearance:** Enhanced Reliability

**Language:** English

**SELECTED ASSIGNMENTS**

1. **PRICE WATERHOUSE COOPERS**

**Role**: Full-Stack Developer

**Project**:Various

**Duration**: March 2024 – June 2024 (4 months)

**Project Description:**

Mr. Pigida, engaged as a full-stack developer, 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.

**Tasks Performed:**

* 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.
* Leveraged Entity Framework in conjunction with the Unit of Work and Repository patterns for efficient ORM, streamlining data access and manipulation in the .NET Web API application, which significantly enhanced the performance and maintainability of complex income tax calculations.

**Technical Environment:**

.**NET 8.0, C#, Azure**, MS SQL, UWP, **Angular**, MAUI, Blazor, WPF/XAML, **Entity Framework Core.**

1. **ROYAL BANK OF CANADA**

**Role**: Back-End Developer

**Project:** Felix Application Enhancement

**Duration**: December 2022 – December 2023 (13 months)

**Project Description:**

Mr. Pigida, engaged as a back-end developer, was involved in a project to refine the company’s core trade support application as well as designing a set of new smaller stand-alone desktop apps.

**Tasks Performed:**

* 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.
* Was recognized for his 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 his Microsoft Teams ChatGPT bot into a standalone automated WebEx client.
* Enhanced Entity Framework utilization in the flagship Felix application, to optimize data access patterns and improve the efficiency of complex financial transactions, resulting in reduced query times and enhanced overall system performance.
* Utilized Dependency Injection (DI) principles throughout the Felix application architecture, enhancing modularity, testability, and maintainability of the core trade processing system.
* His expertise in C# proved invaluable at RBC, enabling him to navigate and decipher the inner workings of complex systems effectively, even in the absence of documentation.

**Technical Environment:**

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

1. **CI FINANCIAL**

**Role**: Full-Stack Developer

**Project:** Various

**Duration**: January 2021 – October 2022 (22 months)

**Project Description:**

Mr. Pigida, engaged as a full-stack developer, led the design and development of new applications and refined existing ones, bolstering team productivity with innovative tools.

**Tasks Performed**:

* 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.
* Leveraged Entity Framework (EF) to streamline data access and management in the RIF-LIF Payment Calculator/Scheduler and Database Process Launcher/Manager applications, significantly enhancing performance and reducing development time.
* Implemented Dependency Injection (DI) patterns across the newly developed applications, promoting loose coupling, easier unit testing, and improved maintainability of the codebase.

**Technical Environment:**

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

1. **IRESS**

**Role**: Full-Stack Developer

**Project:** Iress Pro

**Duration**: November 2019 – November 2020 (13 months)

**Project Description:**

Engaged as a full-stack developer, Mr. Pigida diligently maintained and enhanced Iress Pro, the company's premier professional trading platform, with a focus on resolving bugs and developing critical improvements.

**Tasks Performed:**

* 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.
* Effectively implemented Dependency Injection (DI) to enhance the modularity and testability of the applications, leading to more maintainable and scalable solutions.
* Utilized Entity Framework (EF) to streamline data access and optimize database interactions, enhancing application performance and simplifying data management across the local systems.
* Leveraged his expertise in ASP.NET and C# at Iress to efficiently serve data to multiple clients, ensuring optimal performance and reliability in data delivery across various applications.

**Technical Environment:**

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

1. **RBC**

**Role:** Full-Stack Developer

**Project:** MoveSnap

**Duration:** April 2019 – July 2019 (4 months)

**Project Description:**

Engaged as a full-stack developer, Mr. Pigida 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. He also designed the underlying PostgreSQL database schema.

**Tasks Performed:**

* Developed an adaptive design feature that dynamically adjusted 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.
* Utilized expertise in ASP.NET and C# to develop scalable backend systems and implement RESTful API endpoints, ensuring efficient data handling and seamless integration with the front-end architecture.

**Technical Environment:**

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

1. **NYMI**

**Role:** Full-Stack Developer

**Project:** Nymi Band Enrollment Application

**Duration:** November 2016 – February 2019 (28 months)

**Project Description:**

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

**Tasks Performed:**

* Designed and kickstarted development for a range of web, desktop, and mobile apps, along with user-centric services for always-on-authentication devices.
* 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.
* Employed Entity Framework (EF) to manage database operations, facilitating streamlined data access and manipulation, which significantly improved application efficiency and maintainability.
* Implemented Dependency Injection (DI) to promote loose coupling within the application's architecture, enhancing code maintainability and facilitating easier unit testing across various components.

**Technical Environment:**

**.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

1. **SCIEX**

**Role:** Front-End Developer

**Project:** Onix - Spectroscope WPF Controller

**Duration:** March 2016 – November 2016 (9 months)

**Project Description:**

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.

**Tasks Performed:**

* Customized Framework for Integrated Testing (FIT) fixtures to manipulate controls and allow UI automation HTML scripts in applications.
* Surrounded his 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.
* Utilized his extensive expertise in C# to enhance the stability and performance of mass spectrometry applications, implementing robust coding practices that ensured reliability and facilitated extensive automated testing.

**Technical Environment:**

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

1. **BMO**

**Role:** Front-End Developer

**Project:** Obligor Linking Project

**Duration:** February 2014 – December 2015 (23 months)

**Project Description:**

Mr. Pigida was involved in the development of 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. He significantly contributed to the evolution of EP-Catalyst, a Silverlight-based platform widely used within the bank.

**Tasks Performed:**

* 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 an 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 his daily developer’s duties, I administered Microsoft Windows Server.
* Applied his deep knowledge of C# to architect and develop innovative solutions that streamlined application functionalities and improved overall system performance, ensuring project success through high-quality code and best practices.

**Technical Environment:**

.**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

**ADDITIONAL PROJECTS**

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| **Client** | **Role** | **Duration** |
| Citi | Full-stack Developer | 2012/10 - 2012/12 |
| Global Financial | Full-stack Developer | 2011/11 - 2012/08 |
| Toromont | Full-stack Developer | 2010/06 - 2011/11 |
| CWB Group | Full-stack Developer | 2009/10 - 2010/05 |
| Green Shield Canada | Consultant | 2008/12 - 2009/08 |
| Toromont | Full-stack Developer | 2008/02 - 2008/11 |
| Systemgroup | Full-stack Developer | 2007/02 - 2008/01 |
| Direct Energy | Full-stack Developer | 2006/09 - 2007/02 |
| Magna International | Full-stack Developer | 2005/11 - 2006/07 |
| Thoughtcorp | Full-stack Developer | 2005/04 - 2005/10 |
| Arbor | Full-stack Developer | 2004/08 - 2005/04 |
| BMO | Full-stack Developer | 2003/04 - 2004/07 |
| CSG | Full-stack Developer | 2003/02 - 2003/04 |
| Arbor | Full-stack Developer | 2002/03 - 2003/01 |
| Cetaris | Full-stack Developer | 1995/05 - 2002/02 |
| [AAVpro Ltd](https://www.microsoft.com/en-us/store/p/buscatch/9nblggh5g5z1) | Mobile Developer | 1996/04 - 2016/03 |
| UkrAlko | Head of IT | 1992/04 - 1994/11 |
| of Sciences | Staff Scientist | 1987/06 - 1992/05 |

**EDUCATION AND TRAINING**

**Education:**

**Master of Science, Quantum Radiophysics and Electronics**

Taras Shevchenko National University

Kyiv, Ukraine

**Bachelor of Mathematics**

Preston University

Karachi, Pakistan

**Certifications:**

* Microsoft Certified Professional (MCP) – Microsoft
* Microsoft Certified Professional (MCPS) - Microsoft
* Microsoft Certified Solution Developer (MCSD), Visual C++ and SQL Server tracks - Microsoft

**Technical Proficiency:**

.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, 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, 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 Web Hosting, MS SQL, ODBC, Oracle, SQLite, MongoDB, PostgreSQL, SSMS, SSRS, SSIS, ETL, JIRA, Confluence.