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Summary

Experienced Full Stack Software Engineer with over 13+ years of expertise in developing and delivering complex software solutions across a range of industries. Proficient in a wide range of programming languages, including C#, Python, and Angular.

Highly adept in full-stack development, from designing and developing APIs to implementing front-end interfaces. Experienced in managing teams and leading software development projects from inception to completion, with a strong focus on delivering high-quality, scalable, and maintainable software solutions.

Strong problem-solving skills, with a demonstrated ability to analyze complex technical problems and provide effective solutions. Excellent communication and collaboration skills, with a proven track record of working with cross-functional teams and stakeholders to achieve project objectives.

Certified in Agile methodologies, with experience in working with Agile software development teams. Keen interest in keeping up with the latest technologies and industry trends, with a passion for continuous learning and professional development.

KEY SKILLS

Programming languages: C# (Expert), Python (Fluent), Typescript, Angular 2+, NodeJS, XAML, Blazor, HTML, CSS, Javascript.

C#: C# 10, .net 6

Asp.Net Core Basics: Web Api, REST, Routing, Middlewares, Filters and Attributes, Application Settings and Configurations, Authentication and Authorization, Minimal APIs

General Development Skills: HTTP/HTTPS protocol, .net cli, Data Structures and algorithms, Angular CLI, Yarn, NPM, Search for solutions.

Programming Paradigms: Object-Oriented Programming, Functional Programming, Procedural Programming, Data Structures, Design Patterns.

Web Development: Asp.net, Angular, Python, Typescript, HTML, CSS (SCSS, LESS), twitter bootstrap, NodeJS (Familiar), JavaScript, JSON, XML, Protobuf.

RDBMS ORM: Entity Framework Core, Dapper

Web Servers: IIS, Nginx, Apache HTTP Server.

Databases Relational: SQL Server, MySQL, SQLite.

Database Search Engines: Elastic Search.

Database NoSQL: MongoDB, Redis, Azure CosmosDb.

SQL: Fundamentals about database design and SQL syntax, constraints, stored procedures

Mobile: Xamarin, .Net MAUI

Engineering practices: Test Driven Design (TDD), Domain Driven Design (DDD), Pair programming, SOLID, KISS, DRY, YAGNI.

Design Patterns: CORS, Event Sourcing, Strategy, builder, Singleton, Abstract Factory, Factory Method, Prototype, Adapter, Bridge, Proxy, Command, Observer, Iterator, Template Method

Source code control: git (Github, Azure DevOps)

Continuous Integration & Delivery: Github Actions, Azure Pipelines, Team City, Circle CI.

Microservices: Cloud providers – Azure, AWS (Familiar).

- : Containerization – Docker.

- : Orchestration – Kubernetes.

- : Serverless – Azure Functions, AWS Lambda (Familiar).

- : Message-Bus – Azure Service Bus.

- : Message-Broker – Azure Service Bus.

- : Event Streaming – Apache Kafka, Azure Event Hubs.

- : API Gateway – Azure, AWS.

- : Reverse Proxy – Traefik.

DevOps: Infrastructure as code (terraform, pulumi)

Dependency Injection: DI Containers (Microsoft.Extensions.DependencyInjection, Scrutor, Lifecycles(Scoped, Transient, Singleton)).

Log Frameworks: Serilog, OpenTelemetry, Log Management(ELK Stack, Datadog).

Metrics: OpenTelemetry, Prometheus, Grafana, ELK Stack, AppCenter, Azure Insights.

Distributed Tracing: OpenTelemetry.

API Clients & Communications: REST, GraphQL(HotChocolate), gRPC.

Unit Testing: Frameworks(xUnit), Mocking(NSubstitute, Moq), Assertion(FluentAssertions).

Integration Testing: WebApplicationFactory.

E2E Testing: Playwright.

Behavior Testing: SpecFlow.

Real-Time Communication: SignalR Core, Web Sockets.

API Documentation: OpenAPI.

API SDK Libraries: Refit, RestSharp, NSwag, Flurl

Object Mapping: AutoMapper, Mapster.

Task Scheduling: Native BackgroundService, HangFire, Quartz

Caching: Memory Cache, Redis (StackExchange.Redis), Entity Framework 2nd Level Cache

Platforms: Microsoft Windows, Mac OS, Linux (Familiar).

Additional Libraries: Swashbuckle, Benchmark.Net, FluentValidation, MediatR, Polly.

Work experience

Express Employment Professionals

March 2024 - Present

Senior Software Engineer

As a Senior Engineer, I led a team responsible for maintaining and developing a mission-critical system that generates over a billion Rand in annual revenue. Leveraging technologies such as ASP.NET Core, .NET MAUI, and related frameworks, I ensured the delivery of high-quality software solutions while driving continuous improvements in performance, scalability, and reliability. My role included hands-on development, architecture design, code reviews, and team mentorship, ensuring adherence to best

practices and agile methodologies. I collaborated closely with stakeholders to align technical solutions with business objectives, contributing to the overall success of the company.

Key Responsibilities:

- Led a team of engineers in the design, development, and maintenance of a large-scale system using C#/.NET technologies.
- Designed and implemented scalable solutions using ASP.NET Core, Angular, and .NET MAUI
- Ensured system performance and availability, supporting a billion Rand revenue stream.
- Conducted code reviews, architectural reviews, and technical guidance to ensure quality and best practices.
- Worked closely with cross-functional teams, including DevOps, QA, and Product Management, to deliver software solutions aligned with business goals.
- Optimized system performance, troubleshooting complex issues, and reducing downtime.
- Mentored and coached junior engineers, fostering a collaborative and high-performance team environment.
- Managed technical debt and contributed to continuous improvements in development processes and tools.

Infinet BIS

May 2019 – Jan 2024

Senior Software Engineer

Technologies: C#, Angular, Xamarin, UWP, WPF, IIS, Azure, Docker, Xceed, Syncfusion, Telerik

Main responsibilities:

- Supervising and leading a team of software developers during the development of a robust upgrade version of the company's software applications, resulting in improved user experience.
- Designed and developed a number of microservices (**Asp.net Core, Azure, MongoDB**).
- Demonstrated expertise in translating the client's specific needs into easy-to-understand software solutions during sales presentations.
- Proficiently trouble shoot simple and complex technological issues for different assigned projects, achieving over 95% customer satisfaction rate.
- Designed and developed data processing and monitoring tools (**WPF**).
- Made substantial contribution to the migration of client's web from AngularJS to Angular 2+ framework.
- Enhanced the application's feature to efficiently fix the bugs and optimize the overall performance, reliability and efficiency.
- Utilized software engineering expertise to develop products throughout the software lifecycle to boost business efficiency, from ideation and requirements definition through to development

and successful deployment.

- Designed and developed a library for processing of tubular datasets used by COVID self-screening app accessed by 15000+ users daily.
- Made a substantial contribution to development of APIs (Asp.net Core).
- Extended application's functionality to support numerous streaming operations (Filter, map, reduce etc.) via lambda functions from the UI.
- Architected, developed and deployed to Azure, Your Health Data Assistance website – a web application that helps Doctors monitors the progress of their patients.
- Led a team that successfully designed and delivered a custom-made Customer relation app. (**WPF, SQL Server**).
- Code reviews, mentoring of junior developers
- Writing of product's documentation and maintaining of documentation driven development (DDD) process for applicable projects.

Afrimoola

June 2021 – Feb 2022

Software Engineer (Part time)

Technologies: Xamarin, Angular, UWP, Asp.Net, Azure, WPF, Python, Xceed, Syncfusion, Telerik

Main responsibilities:

- Supervised and lead a team of software engineers during the development of company's banking mobile app, API, and integrating with third part service providers.
- Provided prompt solutions and proactive troubleshooting support to swiftly resolve subtle and complex as the Team Lead of the software engineering team.
- Documented all supported systems and applications to effectively train the new and existing team members.
- Creation of automation framework and libraries for system upgrade and provisioning in WPF.
- Conducted series of C# **SOLID** principles and unit testing training for the team, improving overall quality and design awareness.
- Wrote complex Stored procedures, scripts using joins.
- Determined areas for improvements by periodically monitoring the current company systems to consistently boost business efficiency.

Rhona Group

Jan 2018 – April 2019

Software Engineer

Technologies: Asp Core MVC, XAMARIN, UWP, Dynamics 365, WPF, Xceed, Syncfusion, Telerik

Main responsibilities:

- Leading the design and development of system and process to ensure solution developed for is build using contemporary development methodologies to find appropriate solutions for most challenging problems.
- Involved on release base software delivery approached on gathering, development, maintenance phase of SDLC of 3 tier architecture.
- Worked on BL and DAL layer classes and integrated in UI using MVVM pattern.
- Expertise working on **Triggers, Binding, Styles, Data Template. Control Template, Routed Events, Converters, layout Panels** in XAML.
- Created UML diagrams and wrote some Technical Design Documents TDD before implementing new features.
- Implemented ADO.NET Entity Framework and LINQ to objects to connect to SQL server database from repositories classes for retrieving, manipulating, querying, storing data from the database.

Liyatech

Jan 2017 – Dec 2017

Data Security Analysts.

Technologies: Change Guardian, Access Governance, Active Directory, Windows Server, Active Directory

Main responsibilities:

- Implementation of Change Guardian - to rapidly identify and respond to privileged-user activities that could signal a security breach or result in compliance gaps.
- Planning and implementation of Micro focus Change Guardian.
- Planning Security needs for different organizations (Large and Small).
- Exchange Server setup and Management.
- Active directory setup and management.
- Windows Server Setup.
- Network Setup and Administration.

Digihelp

Jan 2014 – Dec 2016

Technologies: Xamarin, Asp.net Core, WPF, UWP, Azure, Angular, Xceed, Syncfusion, Telerik

Main responsibilities:

- Established and utilized strategic methodologies to efficiently analyze the company's database and develop mapping specifications.
- Led the onshore and offshore applications development team to verify adherence to the highest level of quality standards while also ensuring that all requirements are accurately met.

- Developed a in house mobile and web app service delivery app.
- Modified angular app to optimized the overall application's performance and better its user experience.
- Utilized strategic engineering procedures to maintain and improve company's service delivery app.
- Designed and executed a brand-new customer solution management tool through angular and asp.net core to efficiently monitor, encode, and resolved customer questions/concerns.
- Developed the rich visual components through WPF and Silverlight using XAML and Expression Blend.
- Created an application in WPF that generates Silverlight Class Library by taking XML file as an input.
- Implemented Microsoft Enterprise Library and ADO.NET to connect to SQL server database with Silverlight Enabled WFC service for retrieving, manipulating, querying, storing data from the database with the Silverlight module.
- Create custom for WPF
- Implemented SOA architecture with different WFC services to communicate for distributed services.
- Participated in Business Logic module and Model class using c#.
- Involved in Debugging and Testing using Integration Testing and Functional Testing.
- Integrated the assemblies into the main project.
- Worked in 3-tier architecture-based project.
- Designed UI screens and implemented application login using Asp.net.
- Extensively used validation controls and custom validation to validate web forms.
- Created and consumed Web Services.

Microsoft Student Partner

Jan 2013 – Dec 2013

Tech Driver - University of the Free State

Main responsibilities:

- Learn more about latest technologies and particularly Microsoft technologies
- Host tech events, workshops and hackathons
- Build and grow a community of students on-campus and online
- Join exclusive Microsoft training events to learn the latest technologies.
- Grow and nurture a community of students and faculty on-campus and online.
- Enhance their skills and career opportunities.
- Work alongside Microsoft professionals, assisting them during hackathons and events.

Certificates

1. Microsoft Certified: Azure Fundamentals
2. Microsoft Certified: Azure Developer Associate
3. Certified C# Developer

Languages

- IsiNdebele: Mother tongue.
- English: Fluent, excellent command written and spoken.

Developed And published Apps

UWP (150k Downloads)

<https://www.microsoft.com/store/productId/9WZDNCRD1LGF>

Xamarin Forms

<https://play.google.com/store/apps/details?id=com.smartbible.app>

<https://apps.apple.com/ie/app/star-strike/id1541280689>

<https://play.google.com/store/apps/details?id=ie.starstrike>

[.Net Maui](#)

<https://apps.apple.com/us/app/miella/id1663634427?platform=iphone>

<https://play.google.com/store/apps/details?id=com.miella.beauty>

[Pink Ladies – Apps on Google Play](#)

Online presence

- **Stackoverflow** - [User Siphamandla Ngwenya - Stack Overflow.](#)
- **Linkedin** - <https://www.linkedin.com/in/siphamandla-ngwenya-16349529/>

References available on request

Yolanda - Infinit BIS

Nyaladzi – Microsoft South Africa

Getrude - Digihelp

Yena - Rhona Group

Nick Addey – Star Strike

Andy – Digihelp

Aslam – Freemedia