

NEWT FOURIE

Senior Software Engineer

- Centurion, South Africa
- LinkedIn
- +27 78 863 5285
- StackOverflow

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WHO AM I?

I am a software engineer with a zest for technology, innovation, and continuous learning. My journey through the realms of software development has been fueled by a deep-seated curiosity about technology, sparked by my early fascination with gaming. This passion has shaped not only my career but also my personal life, where I immerse myself in tinkering with tech, from enhancing my home network with tweaks to my own Pi-hole to expanding my collection of retro games.

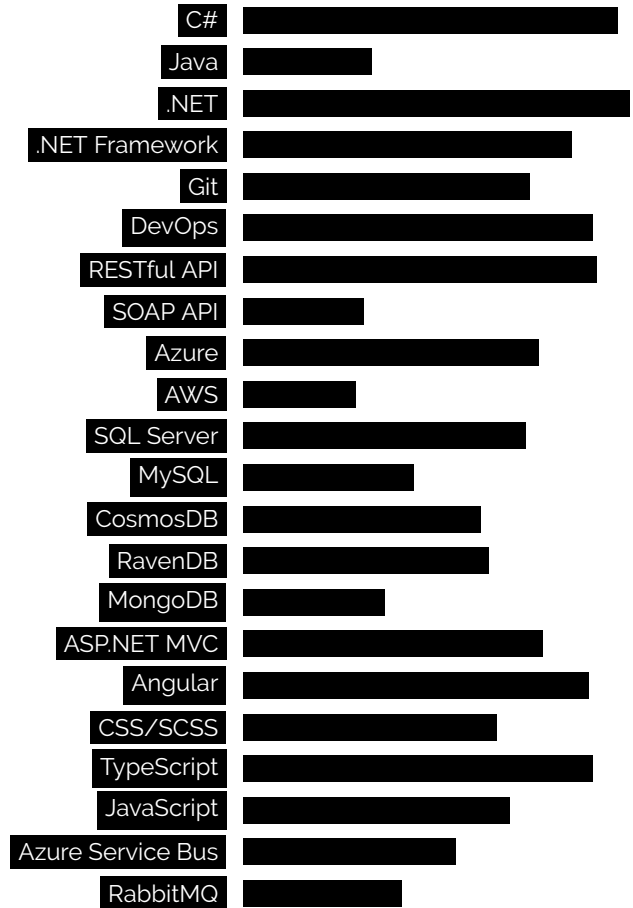
In my professional life, I'm dedicated to addressing complex issues head-on, leveraging both my technical skills and a thoughtful approach to craft effective and high-quality solutions. My experiences have taught me the importance of adaptability, patience, and collaboration, allowing me to contribute meaningfully to any projects or tasks that I work on. While I understand and appreciate the importance of teamwork, I usually do my best work when given the space to work independently. This autonomy allows me to dive deep and focus, allowing me to produce well-crafted solutions. That being said, I'm always ready to collaborate and share insights with my team to ensure our collective success. This is a key part of the work that we do, because I strongly believe that software development is done at its best when done with collaboration. Teamwork always makes the dream work! I pride myself on creating and delivering high-quality solutions. My career is a testament to how technology can reshape businesses and streamline operations, underscored by my commitment to learning and excellence.

Every day presents a new opportunity to explore the evolving landscape of software development, from experimenting with the latest front-end frameworks, to understanding the newest updates in programming languages and their runtimes, as well as exploring the frontiers of cloud computing. My enthusiasm for development is paralleled by my passion for gaming; and this is a constant reminder of the endless possibilities technology offers.

At my core, I'm a dedicated developer, passionately engaged with technology, and committed to continual learning. My professional journey is a blend of achieving operational excellence, fostering a positive workplace culture, and pursuing technological advancements, all while keeping the fun and excitement of discovery alive through my hobbies and interests.

SPOKEN LANGUAGES

- English - native
- Afrikaans - secondary
- Japanese - studying



EXPERIENCE

2020 – 2024

Senior Software Engineer

Entelect Software: Internal Projects

I led several key projects during my time on the team, significantly enhancing administrative efficiency through a "metadata" system that we developed and ensuring seamless data synchronization with an application we can call "data-sharer". I was promoted to Senior Software Engineer at the end of 2020. Among my notable efforts was the re-engineering of our legacy reviews system, transitioning from AngularJS to a modern tech stack for improved maintainability and performance. Additionally, I crafted NuGet packages to simplify Azure API Management interactions, among other shared logic used throughout our projects. I also played a central role in the development of a team planner system, leveraging extensive employee data and "metadata" to optimize team allocations. When I joined the team there were roughly four projects, by the end of 2023, the team's portfolio had expanded to nearly fifteen diverse projects.

.NET / .NET Framework / JavaScript / ASP.NET MVC / SQL Server / CosmosDB / Azure / Java / MySQL / Angular / TypeScript / IIS

2019 – 2020

Intermediate Software Engineer

Entelect Software: FNB Wealth SPM

During my time on this project, I enhanced financial technology integrations and streamlined investment processes. My key role involved developing an API for FNB's mobile app, facilitating secure investment transactions and improving the communication pipeline. This initiative directly supported transaction authorization and seamless management of shares. Additionally, I briefly maintained a customer-facing website that helped investor's manage their current investments. In order to get investment data I worked on a SOAP API that integrated with the JSE.

.NET Framework / JavaScript / ASP.NET MVC / Java / SOAP

2019 – 2019

Intermediate Software Engineer

Entelect Software: Service Desk

My role on this project was optimizing eDiamond, an online bidding platform for diamond materials. My efforts were centered on improving system performance and user experience, particularly under high-load scenarios. By implementing strategic caching and optimizing API calls, I significantly enhanced the platform's responsiveness and efficiency. This project was an excellent opportunity to apply performance optimization techniques, ensuring a smooth and reliable bidding process for users.

SQL Server / .NET Framework / JavaScript / ASP.NET MVC

2018 – 2019

Intermediate Software Engineer

Dariel: BetterLife

During my time at BetterLife, I worked on enhancements and adjustments to their BetterBond application, redesigning their bond application management system for enhanced efficiency when applying for home loans across multiple banks. I led the development of a dynamic validation engine, utilizing RavenDB for flexible rule storage and execution, which helped streamline the application process by adapting to various bank requirements. Both BetterBond and the rules engine involved leveraging modern tech stacks, within a microservice architecture powered by RabbitMQ, ensuring scalable and responsive application performance. My efforts not only improved process efficiency but also significantly enhanced the system's adaptability and user experience.

SQL Server / RavenDB / .NET Framework / RabbitMQ / Angular / TypeScript

2018

Intermediate Software Engineer

Dariel: Nedbank MFC

I worked on the MFC vehicle financing website that is available to the public. My goal was ensuring a user-friendly interface aligned with Nedbank's style standards. I was also deeply involved in establishing DevOps practices, a new venture for the MFC team. This process enhanced project workflows with automated builds, testing, and deployments; ensuring faster delivery times and more reliable outputs. This was achieved using Jenkins, XL Deploy, and XL Release. This foundation in DevOps not only improved operational efficiency but also set the stage for the team's future projects to be successful, facilitating continuous integration and delivery processes.

Angular / DevOps / XL Deploy/Release / PowerShell / ASP.NET MVC / .NET Framework

2018

Intermediate Software Engineer

Dariel: WbX

My contribution during this time was working on an Identity Server for a single sign-on solution. I was also involved in setting up a remote Azure instance for QA testers to use, establishing DevOps practices with Jenkins and PowerShell. Additionally I also assisted the team with bug fixes for the WbX website.

PowerShell / Identity Server 3 / Jenkins / ASP.NET MVC / Azure / .NET Framework

2017 – 2018

Intermediate Software Engineer

Dariel: Client Redacted

The project that I worked on during this time was a cashless transaction and settlement platform for a "Redacted" client. This innovative platform, designed to enable users to conduct transactions without physical cash, was built using a microservices architecture with .NET Core 2 for the backend, integrating secure APIs, and making use of RavenDB and SQL Server for data storage. I led the setup of a continuous integration and deployment pipeline with Jenkins, Nant, and PowerShell scripts. To further enhance code quality I was also heavily involved with setting up and configuring Sonarqube. Additionally, I developed a prototype Android application using Xamarin; for a POS terminal that the client wanted to use, tackling this unique challenge in making transactions with a phone's built in NFC. This project was a pivotal learning experience for me, and deepened my skills in understanding scalable system design and inter-service communication via RabbitMQ.

SQL Server / RavenDB / RabbitMQ / .NET Core / Angular / PowerShell / ELK / Xamarin

2016 – 2017

Software Engineer

Entelect Software: Standard Bank

This was a "data warehouse" themed project, that aimed to centralize diverse data sources for better analytics. My role utilized SSIS to streamline data integration from multiple databases, including SQL Server, Oracle DB, Teradata, and PostgreSQL, facilitating efficient data flows and process pipelines. This initiative was geared towards enhancing reporting capabilities and providing actionable insights for the bank. While my tenure concluded before the project's completion, my efforts laid a solid foundation for its future success. The project's goal was to achieve near-real-time data updates and insights.

SQL Server / Oracle DB / Teradata / PostgreSQL / SSIS / ASP.NET MVC / .NET Framework

2016

Software Engineer

Entelect Software: Internal Projects

I focused on enhancing the internal leave management system. The key improvements included the integration of new leave types such as discretionary, study, and birthday leave, facilitating a more comprehensive leave management experience for employees. Additionally, I worked on refining the user interface to display leave balances more fluidly. This was a small change to allow the employees to see their leave days available, as these balances would only update once a month at the payroll sync date. These enhancements not only improved the leave application process but also provided the foundation for the company to add additional types of leave that could be allocated in the future.

ASP.NET MVC / SQL Server / JavaScript / .NET Framework

2016

Software Engineer

Entelect Software: Silica

I took lead on a project called "QC Rejection Manager"; this was a system designed to streamline the management of Quality Check (QC) rules for investment products. My involvement centered around developing a Java-based application interfacing with MongoDB, aimed at enhancing operational efficiencies by intelligently managing and eliminating duplicate QC rules. This project demonstrated my ability to navigate complex data handling and rule-based systems. It faced challenges in deployment due to budget constraints; which led to the project being dropped.

MongoDB / Java / Apache Web Server / Maven

2015 – 2016

Software Engineer

Entelect Software: Silica

During this time, I worked on a system for Silica that streamlined the management of fund transfers for pre- and post-retirement plans. This system utilized AlpacaJS for dynamic form generation, improving the application process' flexibility. The project stored the AlpacaJS form configurations in a SQL Server Database, while a .NET API was used to serve the configurations to the front end. Despite challenges that included evolving project requirements, our team delivered a solution that enhanced the administrative efficiency for Silica's clients.

AlpacaJS / SQL Server / .NET Framework / JavaScript

2015

Software Engineer

Entelect Software: Silica

I worked on the web maintenance for clients such as Prudential and Ashburton Unit Trust; focusing on ensuring their websites remained functional, user-friendly, and up-to-date. My responsibilities included implementing updates, troubleshooting bugs, and adding new features to meet evolving client needs. This role sharpened my skills in ASP.NET MVC and JavaScript, and how they are used in real world applications; as this was the start of my development career after University.

ASP.NET MVC / JavaScript / .NET Framework

2013-2014
part time

Temporary Software Developer

Biddcom Software

I contributed to diverse projects, notably developing interfaces and APIs for MetroRail. Enhanced my skills in ASMX, WCF, and native Android app development, gaining hands-on experience with MySQL and MS SQL Server. This role was crucial in applying parts of my theoretical knowledge to practical software solutions, laying a solid foundation for my career.

ASMX / WCF / Native Android / MySQL / SQL Server

2010
part time

General Assistant

Biddcom Software

I provided technical support through tasks like wiring Ethernet cables, installing software, and conducting tests on applications developed by Biddcom. This early exposure to the technical field honed my attention to detail and sparked my interest in software development, setting the stage for my professional growth.

EDUCATION

2014

BScIT – Honor's Degree

Major: Computer Science

The University of Johannesburg

2011 – 2013

Bachelor of Science in Information Technology (BScIT)

Majors: Computer Science and Informatics

The University of Johannesburg

2006 – 2010

Matric

Subjects: English, Afrikaans, Mathematics, Physical Science, Information Technology, Accounting, Advanced Programme Mathematics

Parktown Boys' High School

PROFESSIONAL DEVELOPMENT & ACHIEVEMENTS

In my career, I've prioritized knowledge sharing and innovation, leading initiatives like a developmental dojo at Entelect from 2020 to 2023. This dojo was focused on development fundamentals like SOLID principles and practical meta principles (DRY, YAGNI, Separation of Concerns, etc.). The format of an Entelect dojo is a blend of theory with hands-on practice. This dojo enriched my peers' software development skills. My training presenter role extended to demystifying web technologies (Angular, HTML, CSS, JavaScript) in our web front-end forum, fostering an interactive learning space for a broad audience (the forums at Entelect were always promoted as something that was not exclusive to developers) from 2021 to 2023.

A defining moment in my academic journey was the UPSI (Ubiquitous Products and Services Innovation) project during my honors year in 2014, collaborating with a Colombian university on a safety system for motorcycle helmets; a testament to the impact of cross-cultural collaboration and the potential of technology to solve real-world problems.

These experiences reflect my dedication to not only advancing my technical skills but also contributing to the collective knowledge of my peers and the broader tech community. My journey has been one of constant exploration, learning, and sharing, driven by a belief in the transformative power of technology.

HOBBIES

In my downtime, I immerse myself in a world of platforming and story-rich games, drawing from the nostalgia of early PlayStation days and a cherished Game Boy Color that I found at the rAge expo in 2022. My collection spans cherished consoles and games, each with its own story, from PlayStation to Nintendo. Music of varied genres sets the backdrop of my life, while my home network serves as a tech lab for tinkering, utilizing tools like WireGuard VPN and Pi-hole, as some of the small side projects that I've embarked on.

The digital realm offers endless exploration, from tech forums to the latest in software development, constantly fueling my curiosity. Off-screen, I enjoy collecting Funko Pops, which celebrate my favorite characters across gaming and film. These hobbies encapsulate my love for technology, gaming, and continuous learning, mirroring my journey as a developer and enriching my life with constant innovation and discovery.