

William R. Chavula

Software Developer

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PROFESSIONAL SUMMARY

Software engineer with 13 years of experience in software development and telecoms, specializing in data-driven strategies and product development. Holds a master's degree in software engineering and has a strong interest in mobile application development and backend engineering. Proven track record in leveraging analytics to drive revenue growth and enhance customer retention. Skilled in managing cross-functional projects and mentoring teams to implement scalable solutions.

PROFICIENCY

Languages: Python | JavaScript | Node.JS | C# | Dart | .Net Core | HTML/CSS |
Frameworks: React | Django | Flutter | Express | Xamarin | Django Rest Framework | FastAPI
Unit Testing: XUnit | Moq | Flutter Test | Mocktail | Jest | Enzyme | Pytest
Version Control: Git | GitHub | Azure Repos
Database: PostgreSQL | MongoDB | SQL | Oracle
Cloud: Azure
Others: Docker | DevOps | REST APIs | SDLC | Agile

EDUCATION

SOUTHERN METHODIST UNIVERSITY / Dallas, Texas	08/2023 – 05/2025
<ul style="list-style-type: none">Master of Science in Software Engineering	GPA: 4.0
UNIVERSITY OF MALAWI, CHANCELLOR COLLEGE / Zomba, Malawi	02/2007- 12/2010
<ul style="list-style-type: none">Bachelor of Science in Computer Science and Mathematical Statistics	

WORK EXPERIENCE

GRADUATE RESEARCH ASSISTANT (EDTECH)	08/2023 – 05/2024
<i>Supervisor: Dr Prajakt Pande, Simmons School of Education</i>	
Southern Methodist University, Dallas, TX	
<ul style="list-style-type: none">Redesigned and independently developed a full-stack application for an immersive embodied learning tool targeting middle school students in the Dallas DFW area.Utilized HTML, D3.js, JavaScript, and CSS for the frontend, and Python, FastAPI, Pydantic, and Prisma ORM for the backend, with MongoDB for data storage.Logged real-time interactions between users and the frontend application, ensuring accurate data collection for ongoing research utilized in approximately 10 schools with over 30 students.	

- Performed data cleaning and mining on user data collected from a VR game, processing complex datasets that tracked users' eye movements as they navigated a virtual environment to learn cellular biology.
- Implemented an automated reporting system that generated comprehensive reports on user interactions and performance, which were sent directly to the lab PI and uploaded to Box storage for easy access and analysis.

SOFTWARE DEVELOPER - Freelancing

10/2019 – 08/2023

Highlighted Projects

1) TIDYE – APRIL 2021

- Conceptualized and implemented from scratch the first-of-its-kind mobile app cataloging restaurants and eateries in Malawi, reaching 100+ downloads and addressing the need for a centralized listing.
- Built the app from the ground up using Google Flutter, Google Firebase, and the BLoC pattern for state management.
- Integrated local data caching to optimize performance and reduce mobile data consumption.

2) CARD MATCH – NOVEMBER 2021

- Contributed as the UI developer and integrated Firebase Firestore to implement a real-time leaderboard for a mobile memory card game.
- Collaborated closely with a team member, ensuring smooth integration of features and alignment with project goals.
- Enabled offline gameplay by managing local data persistence with an SQLite database and supported social login through Facebook for cloud-based game progress storage.
- Took ownership of bug fixes, developed custom UI components, and implemented custom renderers in Xamarin.Forms to enhance user experience and behavior.

3) JEPAYMENTS.COM – DECEMBER 2021

- Designed and developed a portfolio website for a payments professional, tailored to showcase the client's expertise and achievements.
- Built the project using React with Material UI for sleek and responsive styling.
- Implemented custom hooks to enable code reuse across features such as scroll-to-element functionality, animation triggers, and form handling.
- Managed state efficiently throughout the application using React Context, ensuring seamless user interactions.

4) STASHR – APRIL 2021

- Undertook and completed a self-driven personal finance management app project using C# and Xamarin.Forms. The app provides users with an intuitive view of their income, expenses, and savings.
- Utilized the MVVM design pattern to ensure clean architecture and maintainable code.
- Integrated an SQLite database to securely store and manage user transactions, enabling seamless data persistence across sessions.

BUSINESS ANALYST – Telekom Networks Malawi / Malawi

02/2015 – 09/2019

- Developed business strategies by leveraging customer and market analytics to drive revenue growth and reduce churn.
 - Led a project targeting low-activity customers with personalized incentives, resulting in a 50% increase in data activity and a 20% boost in data revenue within one year.
- Analyzed network, customer, and revenue data to design innovative, customer-focused products.
 - Created a student-targeted data plan, driving improvements in customer loyalty, retention, and new customer acquisition.
- Managed and implemented system upgrade projects for the prepaid billing system in collaboration with Product Management and external vendors.
 - Worked directly with Huawei system engineers to execute a software upgrade on the prepaid charging system, delivering more dynamic and intelligent pricing.
- Evaluated revenue, acquisition, and pricing models against quarterly and annual performance targets.
 - Compiled daily and monthly business intelligence reports, providing key insights into revenue trends and subscriber behavior to inform decision-making.
- Designed and launched 20+ innovative mobile data packages, ensuring seamless functionality and accurate pricing with minimal time to market as fast as a few hours, supporting a customer base of over 4 million users.

FAULT MANAGEMENT SUPERVISOR – Telekom Networks Malawi / Malawi

06/2011 – 02/2015

- Supervised, trained, and mentored a team of 5 Network Surveillance Engineers, fostering a culture of continuous learning and operational excellence.
- Introduced and led weekly in-house training on incident escalation matrices and fault dictionaries, resulting in a 40% reduction in network downtime.
- Contributed to the development and implementation of 2 network surveillance policies and procedures, ensuring swift and efficient incident resolution.

SOFT SKILLS

- Project Management
- Collaboration and teamwork
- Work with Minimal Supervision
- Adaptability and Flexibility
- Problem Solving
- Excellent time management
- Good communication
- Organization

UDEMY – MASSIVE OPEN ONLINE COURSES (MOOCS)

- Dart and Flutter: the complete developer's guide 06/2021
- React Front to Back: Full Stack React, Redux, and NodeJS 02/2021
- The complete Flutter development boot camp with Dart 08/2020
- Complete C# Masterclass 06/2020