William Chavula

Richardson, TX, 75080 | www.williamchavula.com | wchavula@smu.edu | www.github.com/WilliamChavula

Profile

Highly accomplished and results-oriented professional with over a decade of experience across technology and business domains. Possessing a Master's degree and a proven track record in software development, cloud computing, network operations (NOC), business analysis, and team leadership. Adept at leveraging technical expertise and analytical insights to drive strategic initiatives, optimize operations, and deliver impactful solutions across various platforms and industries.

Education

M.S. SOFTWARE ENGINEERING | MAY 2025 | SOUTHERN METHODIST UNIVERSITY, DALLAS, TEXAS

B.S. COMPUTER SCIENCE | DEC 2010 | UNIVERSITY OF MALAWI, ZOMBA, MALAWI

Proficiencies

Languages	C# **|** Python **|** JavaScript **|** TypeScript **|** Dart
Frontend Frameworks	React	Django	NextJs	Flutter	.Net Maui
Backend Frameworks	Express	Fastify	Django Rest Framework	FastAPI	NodeJS	.Net
Software Testing	XUnit	Moq	Pytest	Jest	Flutter Test	Mocktail	Enzyme
Version Control	Git **	** GitHub	Azure Repos
Databases	MongoDB **|** PostgreSQL **|** SQL
Cloud Services	AWS **|** Azure **|** Kubernetes **|** Docker **|** Azure DevOps **|** GitHub Actions

Experience

SOFTWARE DEVELOPER | FREELANCING | OCT 2019 – PRESENT

1) **SAAS RESUME BUILDER WITH LLM INTEGRATION – MAY 2025**
   - Developed an intuitive, multi-step resume-building application, improving user experience through dynamic customization options and a streamlined creation process.
   - Implemented a subscription-based pricing model with Stripe integration, enabling automated billing, tiered access control, and seamless upgrades from basic resume creation to AI-powered professional summary generation.
   - Engineered robust authentication and user management using Clerk, ensuring secure account access and reliable user experience.
   - Website link: https://ai-resume-builder-pearl.vercel.app/

2) KNOWLEDGE-SHARING APPLICATION – FEBRUARY 2025

- Designed and developed a scalable microservices-based knowledge-sharing platform, supporting posts, comments, authentication, and notifications, and integrating Elasticsearch for optimized full-text search and content discovery.

- Engineered containerized services using TypeScript and Fastify, implementing RPC for efficient inter-service communication and leveraging Docker to enhance modularity and scalability.
- Built an asynchronous notification system with Python, Redis, and Celery to automate email alerts for new comments, alongside an event-driven auditing system utilizing Kafka and Zookeeper for scalable log processing.
- Optimized data storage by leveraging PostgreSQL for structured content and MongoDB for semi-structured audit logs, while integrating Cloudinary and AppWrite for efficient image processing and storage.

3) SECURE PREFERENCES – JANUARY 2025

- Designed and developed a lightweight .NET library for quick prototyping and securely storing application preferences.
- Includes built-in support of RSA and AES encryption algorithms for robust encryption, and support for custom encryption providers by developers.
- The library exposes a simple and intuitive API and has 90+ downloads to date.
- View library using this link: https://www.nuget.org/packages/SecurePreferences/

4) TIDYE – APRIL 2021

- Conceptualized and implemented 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.

5) 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.

6) 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.

7) 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.

TEACHING ASSISTANT | SOUTHERN METHODIST UNIVERSITY | AUG 2024 – MAY 2025
- Developed and honed effective communication, interpersonal, and presentation skills while interacting with diverse student populations.
- Led, personally tutored, mentored, and provided constructive feedback to 60+ undergraduate and graduate students in Computer Architecture and Design, Software Requirements, and Object-Oriented Analysis and Design.
- Demonstrated superior organizational, time management, and critical thinking skills through coordination of teaching materials and management of student questions.
- Effectively addressed student concerns regarding their grades and resolved conflicts through empathetic communication and active listening.

RESEARCH ASSISTANT | SOUTHERN METHODIST UNIVERSITY | SEP 2023 – MAY 2024
- 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 ten 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 sent to project supervisor and other key stakeholders.

BUSINESS ANALYST | TELEKOM NETWORKS MALAWI | FEB 2015 – SEP 2019
- Leveraged data analytics to inform strategic customer engagement initiatives, resulting in a 50% increase in user activity and a 20% revenue growth through the design and implementation of targeted, data-driven customer incentives.
- Collaborated with cross-functional teams and external vendors to manage the successful implementation of critical prepaid billing system upgrades, ensuring zero service disruption and minimal impact on customer experience.
- Led the analysis of market trends and user needs to define and document requirements for over 20 innovative mobile data packages, ensuring seamless functionality and accurate pricing, achieving rapid market launch within a 12-hour timeframe.

NOC SUPERVISOR | TELEKOM NETWORKS MALAWI | JUN 2011 – JAN 2015

- Oversaw a team of 5 Network Surveillance Engineers within the Network Operations Center (NOC), responsible for proactive network monitoring, fault management, and incident resolution.
- Developed and delivered crucial NOC training on incident escalation and fault analysis, leading to a 40% reduction in network downtime.
- Contributed to the standardization of NOC procedures by developing and implementing two key network surveillance policies.

Skills & Abilities

- Project Management
- Excellent time management
- Work with Minimal Supervision
- Adaptability and Flexibility

- Problem Solving
- Collaboration and teamwork
- Effective communication
- Organization

Massive Open Online Courses (MOOCs) Certificates

- The Git & GitHub bootcamp
- Dart and Flutter: the complete developer's guide
- React Front to Back: Full Stack React, Redux, and NodeJS
- The complete Flutter development boot camp with Dart
- Complete C# Masterclass