

WESLEY MYBURGH BASSON

Wesley M. Basson

- Passed CFA Level I Examination (CFA Level II Candidate), BEng (Hons) Mechanical / Aero Engineering
- Last Roles: Tech Lead – *Vaultavo Inc.*
- Significant achievements during studies:
 - University
 - Placed joint 3rd academically (out of +/- 200 students) in 3rd year of study (BEng Mechanical Engineering)
 - Multiple subject distinctions in every year of study
 - Schooling:
 - Placed 1st (out of +/- 150) in Space & Aviation Challenge at University of Pretoria, resulting in a scholarship award
 - Placed 2nd in Eskom National Science Expo
 - Top 20 finish in National Afrikaans Olympiad (out of thousands of students)
 - Full academic colours at high school for 2 years
- Notice period: 1 Calendar Month

PERSONAL DETAILS

Location:	Johannesburg
Nationality + Passport:	South African
ID Number:	***
Languages:	English, Afrikaans

EDUCATION & TRAINING

Passed CFA Level I Exam	Institution Attended: CFA Institute Date: June 2015
Bachelors of Engineering (Hons)	Institution Attended: University of Pretoria Date: 2009
Matric (Distinction)	Institution Attended: Trinityhouse High School Date: 2005

CAREER SUMMARY

COMPANY	DESIGNATION	PERIOD
Vaultavo Inc	Tech Lead	May 2022 – Current
The Hollard Insurance Company Ltd	Senior Integration Developer (<i>Contract</i>)	November 2021 – April 2022
BTS Revenue Assurance (Pty) Ltd	Consulting Engineering Manager (<i>Contract</i>)	February 2017 – November 2021
Litheon (Pty) Ltd	Managing Director	June 2015 – Current
Aerosud Aviation (Pty) Ltd	Mechanical / Aeronautical Engineer	September 2012 – May 2015
MTN SA (Pty) Ltd	Project Co-ordinator (<i>Contract</i>)	March 2011 – September 2012
Corpro-Umphathi CC	Assistant Project Manager (<i>Contract</i>)	June 2010 – February 2011
Secelec (During Studies)	Assistant Engineer	November 2008 – December 2008
Drake & Scull FM (During Studies)	SAAT Site Manager Assistant	November 2007 – December 2007

EXECUTIVE SUMMARY

Innovative and results-driven **Technical Lead** with close to a decade of experience architecting, developing, and scaling enterprise-grade software solutions. Currently spearheading the design and rollout of Vaultavo's secure, SOC2-compliant, cloud-native platform, built on a robust microservices foundation integrating blockchain technologies and real-time event-driven systems.

Combining a strong **full-stack engineering background** with deep architectural expertise in **C#, ASP.NET Core, JavaScript, React, Node.js, Docker, Kubernetes**, and **Kafka**, I have successfully led cross-functional teams through the entire SDLC — from greenfield inception to production deployment — with a sharp focus on clean architecture, security, and long-term maintainability.

I am passionate about solving complex problems through elegant design, championing SOLID principles, DDD, and CQRS in all development efforts. My leadership style is hands-on and mentorship-driven, fostering a culture of innovation, code quality, and continuous improvement.

With proven success in **agile environments**, CI/CD practices, and multi-environment cloud deployments, I am now seeking to elevate my career towards a **Chief Technical Officer** trajectory. I aim to contribute to forward-thinking organizations where technical leadership, architectural strategy, and systems thinking are essential to business growth.

CAREER HISTORY

COMPANY: VAULTAVO INC
DESIGNATION: TECHNICAL LEAD

MAY 2022 – CURRENT

Duties & Responsibilities:

Projects:

➤ Vaultavo Digital Platform MVP Rollout

As Technical Lead for Vaultavo Inc, I architected and led the development of a secure, scalable, and event-driven backend ecosystem from the ground up. Inheriting a collection of skeletal services, I transformed the codebase into a cohesive, production-ready microservices architecture aligned with SOC2 compliance and modern software engineering standards.

- **Microservices Architecture & Domain Design:** Defined and implemented a textbook microservices architecture, delineating clear business domains and service boundaries. Employed the principles of eventual consistency to ensure data integrity and synchronization across independently deployable services operating in distributed environments.
- **Event-Driven System Design:** Spearheaded the platform's move to an event-driven paradigm, utilizing Kafka and ZeroMQ to orchestrate real-time messaging and reactive processing across services, promoting high scalability and fault tolerance.
- **Blockchain Node Integration (Leadership):** Oversaw the architectural and project-level design decisions for services interfacing with blockchain infrastructure. While not directly involved in the low-level node integration code, I was accountable for the system design, data flows, and quality of these integrations, ensuring they conformed to performance and security requirements.
- **Secure, Maintainable Codebase:** Advocated for and implemented SOLID design principles, ensuring a clean separation of concerns across the platform. Introduced a Mediator Pattern via custom abstractions for commands and queries, decoupling controllers from business logic, and streamlining feature implementation and testing.
- **Middleware & Pipeline Architecture:** Developed and integrated reusable middleware components handling cross-cutting concerns such as:
 - Global exception handling and logging
 - Encrypted request/response lifecycle management
 - Hardware interaction workflows and validations
 - Uniform API behavior enforcement
- **Security & SOC2 Alignment:** Embedded best practices for application and infrastructure security across the software lifecycle. Enforced access controls, logging, and secure data exchanges that align with SOC2 criteria.
- **Database Strategy & Management:** Designed distributed PostgreSQL database schemas tailored for scale and resilience. Emphasized normalization, transactional integrity, and high availability.
- **DevOps & CI/CD Integration:** Ensured that every service was Dockerized and deployable via CI/CD pipelines to Kubernetes clusters. Standardized deployment strategies, environment configurations, and rollback mechanisms for safe delivery.
- **Technical Strategy & Leadership:** Led a cross-functional team of backend developers, frontend developers, and DevOps engineers. Facilitated architecture discussions, code reviews, sprint planning, and stakeholder demos. Drove technical excellence through mentorship and the promotion of modern software craftsmanship.
- **Innovation & Continuous Delivery:** Proactively assessed and integrated emerging technologies and architectural patterns, fostering a culture of continuous improvement. Evaluated trade-offs in scalability, maintainability, and performance to guide sound engineering decisions.

COMPANY: HOLLARD INSURANCE
DESIGNATION: SENIOR INTEGRATION DEVELOPER

NOVEMBER 2021 – APRIL 2022

Duties & Responsibilities:

Projects:

- Game On: TIA move to Ekundu
 - Facilitate the proliferation and maturation of microservices through the design, development and implementation of ASP.NET Core Web API's (NET5.0 / NET6.0).
 - Implementation of domain driven design best practices to move the existing codebase away from a tightly coupled mono-repo design. Separated concerns by implementing the mediator and CQRS patterns.
 - Creating SQL stored procedures to perform data operations via Entity Framework Core.
 - Using Azure DevOps to track project progress (Kanban boards – Agile methodology), manage documentation (Wiki), build and manage Artifacts, and for code versioning (with Git).
 - Implementation of pipeline behaviours for Caching (Distributed Cache – Azure Cache for Redis) and Tracing (Logging – Serilog).

Reason for leaving:

Taken up full-time position at Vaultavo Inc.

COMPANY: BTS REVENUE ASSURANCE (PTY) LTD
DESIGNATION: CONSULTING ENGINEERING MANAGER

FEBRUARY 2017 – NOVEMBER 2021

Duties & Responsibilities:

Projects:

- Mobile Application (Android & iOS) and Web Application for maintenance route creation and optimization
 - Using the Expo platform and React Native framework to develop a mobile application for both Android and iOS.
 - Using the React framework for the development of an accompanying web application to facilitate back-office tasks.
 - Using Node.js and Firebase for web API, Cloud Functions, and Realtime & Firestore databases (NoSQL).
 - Using AWS S3 bucket for storing audio files.
- Inventory Management System (Mobile and Web)
 - A separate module of the Routing application (above) using the same architecture.
- Improvement and Automation of Billing Processes
 - Specifically, macro-enabled Excel workbooks with VBA scripting to drive processes to analyse billing data and to prepare bill summary sheets for clients.
 - Development and maintenance of an ASP.NET MVC5 application (in C#) which runs analyses on billing data prior to full bill runs being processed.
 - Node.js invoice sheet generator which takes billing summary spreadsheets as input and outputs a single sheet with invoicing details based on the input data.

Additional Functions

- Business Administration:
 - Involved in decision making processes and business strategy meetings. Perform impact analyses to determine the feasibility and/or consequences of decisions.
- Operations & Systems Management:
 - Managing monthly Mobile Network Operator ("MNO") power consumption bill runs for TowerCo companies that BTS Revenue Assurance (Pty) LTD ("BTS") render telemetry services to.
 - Pioneering automation solutions to enhance the efficiency of the monthly billing processes.
 - Managing the implementation of non-local & local authority tariffs for billing purposes.
 - Managing the calculation of power consumption estimates based on historical data for MNO power usage where telemetry data falls short.
 - Managing account and telemetry data.
 - Leading the development of a mobile application (Android & iOS) that allow routes to be created and optimized to ultimately drive improvement of maintenance personnel efficacy.
 - Also leading further development on the abovementioned application to cater for inventory management.
- Accounts Manager of some BTS clients. I.e. single point of contact responsible for liaison between BTS and clients, for providing clients with solutions to issues raised, for maintaining a good overall relationship with BTS clients.
- Contract Manager for RFP processes. I.e. liaison for all contract related discussions and/or negotiations; facilitating contract negotiations between BTS and clients.

Reason for leaving:

Taken up contractual position at Hollard Insurance.

Duties & Responsibilities:

- Roles:
 - Mechanical Engineer
 - Manufacturing Engineering
 - ME Department
 - Software Developer
 - Operations Systems
 - Operations Systems Department

Project 1

- Airbus A400M Industrialization
- Airbus A400M Continuous Improvement

Functions

- Industrial re-planning of high-level assemblies as part of continuous improvement. Performing industrial calculations, amending routings and defining part families, converting Engineering Bill of Materials to Manufacturing Bill of Materials, and large-scale data-handling and drafting of engineering documentation form part of the continuous improvement
- Designing of machinery to improve production efficiency as part of a production ramp-up
- Conducting cost analyses, drafting up selection matrices and doing feasibility studies to determine the viability of procuring new equipment for production purposes
- Address problems or challenges by proposing engineering solutions to manufacturing engineering management, the project office, shop floor personnel and to production management
- Development of tools in the form of VBA macros to streamline industrialization processes and sustain efficient methods of continuous improvement

Project 2: Airbus A350 CFRTP frame clips

Functions

- Posting industrialization suggestions to Manufacturing Engineering management, program management and production to improve part quality, process flows and production rates
- Assisting with the development of new part blanks and the preservation of engineering data configuration control
- Configuring per part rapid press forming specifications for the accurate forming of CFRTP frame clips
- Playing a supportive role in terms of both manufacturing engineering and mechanical engineering to sustain effective operation of the press

Project 3: ME Department Software Solution

Functions

- Manage and participate in the turnkey, full-stack design and development of a desktop application (developed using Visual Basic and the .NET framework) focused on facilitating Manufacturing Engineering, Special Processes and Digital Data Management staff with their tasks by promoting departmental integration and real-time data sharing
Stack: (F/E) .NET Windows Forms in Visual Basic; (B/E) SQL Server database & stored procedures, ADO.NET for data access.
- Develop and maintain the set of databases (SQL database / MS Access / MS Excel) and the stored procedures and/or business objects required to successfully persist data transactions to aforementioned databases
- Implement software improvements to the application's main project and to the custom classes referenced by the project
- Write supplementary troubleshooting and training manuals while also providing training to staff needing to use the software system.

Other notable areas of operation: Special processes – Composites

Functions

- Conducting internal mock audits to bring manufacturing processes and procedures in line with NADCAP requirements

Reason for leaving:

Retrenched

COMPANY: MTN SA
2012

MARCH 2011 – SEPTEMBER

DESIGNATION: PROJECT CO-ORDINATOR (CONTRACT)

Duties & Responsibilities:

- Mobile Telephone Networks

Projects

- Rollout of a new mobile operator network, leasing space on MTN's infrastructure
- Project Budget: R100M+

Functions

- Acting as the single point of contact (SPOC) between Telkom Mobile and MTN in terms of new colocation applications and approval (or rejection) thereof; receiving all 3rd party applications (primarily Telkom Mobile applications) and processing them accordingly
- Generating final build approvals allowing Telkom Mobile to install their equipment on an MTN site; formulating site-specific conditions the 3rd party has to adhere to
- Proposing, initiating and maintaining key processes (implementing both software and non-software related procedures) to manage the entire project on a grand scale, but also focusing on smaller scale processes allowing individuals to track the progress of specific projects, sub-projects and/or applications
- Understanding and scrutinizing the Main Agreement between MTN and 8ta in order to put forward valid arguments at times when certain procedures and/or occurrences are brought into question
- Database management – managing the national database of all 8ta applications, keeping information on various aspects of the project up to date
- Furnishing management and junior executives of both companies with detailed weekly progress reports on the progress of the 8ta project
- Addressing day-to-day queries about the project, its status as well as its condition

Reason for leaving:

Was offered a permanent position as Manufacturing Engineer at Aerosud Aviation (Pty) Ltd.

COMPANY: CORPRO-UMPHATHI
2011

JUNE 2010 – FEBRUARY

DESIGNATION: ASSISTANT PROJECT MANAGER (CONTRACT)

Duties & Responsibilities:

- Sub-contracted to MTN

Functions

- Assisted in bringing together a collaboration of contractors to produce a green solution for a telecommunication base transmission station (BTS) in a remote area where access to the power grid proved to be too costly
- Chaired various discussions and meetings to streamline the process of shaping and formulating a preliminary design concept
- Actively took part in site visits; identifying problems on site and assigning them to the relevant contractor to address accordingly

Projects

- The main project required the formation of a design for a green solution to be implemented at a remotely based telecommunication base transmission station (BTS)
- The design included the integration and control of a generator set, an array of solar panels, a wind turbine and batteries
- Project budget ceiling was R2.1M

Reason for leaving:

Was offered a contract with MTN South Africa directly.

COMPANY: SECELEC (VACATION WORK DURING STUDIES)
DESIGNATION: ASSISTANT ENGINEER

NOVEMBER 2008 – DECEMBER 2008

Duties & Responsibilities:

Functions

- Assisted with 3-dimensional modelling of parts on Computer Aided Design (CAD) software.
- Participated in problem solving with regards to installations of security and electrical equipment at various sites.
- Assisted with plant inspections.

Projects

- Designed and rendered a 3D CAD prototype of a modular 32U Rack Server Case with the capacity to house between 8 and 64 Li-ion batteries for use in an industrial UPS system

COMPANY: DRAKE & SCULL FM (VACATION WORK DURING STUDIES)
DESIGNATION: SAAT SITE MANAGER ASSISTANT

NOVEMBER 2007 – DECEMBER 2007

Site:

- SAA Technical – OR Tambo International Airport

Duties & Responsibilities:

Functions

- Assisted in identifying facility problems, logging job cards for maintenance of plant equipment including but not limited to aircraft rigging or aircraft maintenance equipment
- Follow up on logged jobs and rectify where maintenance has not been carried out or where required standards were not met
- Facilities and plant maintenance administration.
- General problem solving

ACHIEVEMENTS

Tertiary

- Distinctions in Professional Ethics 451, Aeronautics 420, Heat Transfer 410
- Space & Aviation Challenge, University of Pretoria (2005)
 - High Flyer Trophy for placing 1st in the challenge
- 3rd Academic year – Top Ten academic achievers
 - Merit Certificate of Recognition Overall 4th best student

High School Academic Achievements

- Awarded with Academic Full Colours in 2003 and 2004
- Top Student in Afrikaans in 2003 and 2004
- Participated in Afrikaans Olympiad in 2004 – Finished in the Top Twenty Nationally
- Awarded with Silver Medal at the Eskom Science Expo in 2005