

Johan van Bosch

Senior Software Engineer | Engineering Leader

johan.vanbosch@gmail.com

johanvanbosch.me

linkedin.com/in/johan-van-bosch-61620629

PROFESSIONAL SUMMARY

Senior software engineer and engineering leader with 15+ years of enterprise delivery on the Microsoft stack. Core expertise in C#, .NET, VB.NET, TypeScript, JavaScript, and SQL — building high-throughput microservices, distributed systems, and enterprise SaaS platforms across Azure and AWS. Experienced with messaging systems (RabbitMQ, MSMQ, Azure Service Bus, AWS SQS), ORMs (Entity Framework, Hibernate), Redis, Docker, IIS, and CI/CD pipelines. Progressed from senior developer through team lead to engineering manager at Sage, leading cross-functional teams while remaining close to the code and the craft. Outside of enterprise work, actively builds with Python, AI/ML tooling, IoT, and embedded hardware through personal ventures — bringing a broad technical perspective and a genuine passion for engineering to every engagement.

PROFESSIONAL EXPERIENCE

Senior Software Engineer (Contract)

Nov 2023 — Present

Sage

Remote

- Deliver high-impact features and architectural improvements for enterprise-scale cloud applications used by thousands of businesses globally.
- Build and maintain microservices using .NET, TypeScript, and modern cloud-native patterns on Azure, with a strong focus on reliability and performance.
- Drive CI/CD pipeline improvements and infrastructure-as-code initiatives using Terraform and Azure Pipelines, reducing deployment friction.
- Collaborate effectively within a distributed, cross-functional team — contributing to architecture discussions, code reviews, and technical roadmaps.

Founder & CEO

2023 — Present

Sorg Solutions

South Africa

- Building an AIoT platform combining IoT sensor networks, edge computing, and AI-powered analytics for agriculture and industry.
- Full-stack ownership: custom hardware design (ESP32, Nordic nRF), embedded firmware, cloud backend, and data dashboards.
- Applying enterprise engineering disciplines — clean architecture, CI/CD, automated testing — to a greenfield product from day one.

Senior Developer → Team Lead → Engineering Manager

Mar 2015 — Apr 2023

Sage

Pretoria, South Africa

- Progressed from senior developer to engineering manager, leading cross-functional teams delivering enterprise SaaS products.
- Led Angular-based frontend development alongside .NET microservices, delivering full-stack enterprise web applications at scale.
- Drove adoption of microservices architecture, containerisation (Docker), and automated CI/CD pipelines.
- Mentored and grew engineering teams, establishing coding standards, code review practices, and technical career paths.
- Owned delivery of high-throughput APIs and cloud-native applications serving a large enterprise customer base.

Senior Software Developer

MiX Telematics

Sep 2012 — Feb 2015

Midrand, South Africa

- Built and maintained fleet management and telematics solutions processing high-volume real-time data streams.
- Developed scalable back-end services in C# / .NET with SQL Server, processing high volumes of GPS and sensor events daily.
- Built rich Silverlight user interfaces for fleet management dashboards, reporting tools, and real-time vehicle tracking.
- Collaborated on system integration and data pipeline design for IoT-connected vehicle tracking platforms.

Senior Software Developer

IBIS Technology

Aug 2010 — Aug 2012

Kempton Park, South Africa

- Delivered bespoke software solutions for major mining companies across South Africa and the African continent using .NET, C#, and SQL Server.
- Contributed to full software development lifecycle — requirements gathering, design, implementation, and deployment.
- Introduced improved development practices including source control workflows and automated testing.

TECHNICAL SKILLS

Enterprise & Professional

Languages

- C# VB.NET TypeScript JavaScript SQL HTML/CSS LESS SCSS

Frameworks & ORMs

- .NET ASP.NET Web API Angular Entity Framework Hibernate SignalR

Databases & Caching

- SQL Server MySQL Redis

Messaging & Queues

- RabbitMQ MSMQ Azure Service Bus AWS SQS Azure Queues

Cloud & Infrastructure

- Azure AWS Docker IIS Terraform

DevOps & Tooling

- CI/CD Azure Pipelines GitHub Actions TeamCity OctoDeploy Git

Personal Ventures & Emerging Tech

Languages

- Python C/C++ Dart

Frontend & Mobile

- React Next.js Svelte Tailwind CSS Flutter Vue Nuxt.js

Backend & Data

- FastAPI
- Node.js
- PostgreSQL
- Express
- GraphQL
- Railway
- Vercel
- GCP

AI & ML

- PyTorch
- TensorFlow
- LangChain
- OpenAI API
- Data Pipelines

IoT & Hardware

- ESP32
- Nordic nRF52/54
- Nordic nRF91
- RISC-V
- Zephyr RTOS
- FreeRTOS
- MQTT
- LoRa
- Thread
- Matter

EDUCATION

International Diploma in Information Systems — Internet Development 2007
CTI Education Group | NCC Education | University of Cambridge International Examinations
 Graduated with Distinction

Hoërskool Kempton Park 2005
Matric / National Senior Certificate

SPOKEN LANGUAGES

Afrikaans (Native) English (Fluent)

CERTIFICATIONS

AWS Security Essentials November 2020
Amazon Web Services (AWS) Training and Certification

VENTURES & SIDE QUESTS

Sorg Solutions

AIoT platform for agriculture & industry — IoT sensor networks with AI-powered analytics for predictive insights and operational optimisation.

Biometrica

Personalised health analytics platform analysing 50+ blood biomarkers to generate tailored wellness recommendations.

MindHive

Agentic AI system built on a multi-agent architecture with specialised skills and capabilities. Uses your local computer, web browsing, and internet resources to autonomously achieve desired outcomes — similar in concept to AI coding and automation agents.

Hunhu Home Assistant

Consumer-ready home automation platform for the South African market with local-first control, Thread, and Matter support.

AI Voice Assistant

Full-stack voice AI system running local models on Raspberry Pi with CUDA and Hailo8 for on-device vision inference.

VeeSearch

Visual AI research tool mapping topics as connected nodes on a dynamic canvas for spatial knowledge exploration.

Climatrace

Climate monitoring and environmental tracking platform providing data-driven insights for sustainability.

Plant Palz

Consumer IoT water alarm system with custom ESP32 hardware and embedded firmware for smart plant care.