

Anthony Okala

IT Consultant & Software Engineer

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Professional Summary

With over 10 years of expertise in automation, software development, machine learning, and safety-critical systems. Specializing in Java, Python, JavaScript, TypeScript, PHP, and modern frameworks such as React, Django, Spring Boot, and Laravel. Expert in UiPath, KNIME Analytics, and Power Automate. Fluent in English, German, and French. Currently serving as IT Consultant at DB Regio AG, I specialize in developing automation solutions using Python and UiPath, achieving 80% reduction in manual effort with a goal to reach 99% automation. I'm also the Co-Founder & CEO of ASOK Solutions Engineering SARL. My expertise spans across RPA development, full-stack web development, software development, machine learning, and system architecture, with 9+ years of experience working with automotive clients like Volkswagen AG and delivering solutions for safety-critical systems and DB Regio AG by delivering automation solutions.

Professional Experience

Professional Work

IT Consultant - Vehicle Technology & Planning

DB Regio AG | August 2021 - August 2023

- ~~Developed and deployed automation solutions using Python and UiPath, achieving 80% reduction in manual effort with a goal to reach 99% automation.~~
- ~~Delivered solutions for safety-critical systems and DB Regio AG by delivering automation solutions.~~
- ~~Improved data collection accuracy and efficiency.~~

Software Developer

Achelios GmbH | August 2021 - August 2023

- ~~Developed and deployed automation solutions using Python and UiPath, achieving 80% reduction in manual effort with a goal to reach 99% automation.~~
- ~~Delivered solutions for safety-critical systems and DB Regio AG by delivering automation solutions.~~
- ~~Improved data collection accuracy and efficiency.~~

Java • C++ • Spring Boot • JUnit • Jenkins • Maven • Git • JIRA
Python • VBA • Excel • UiPath • RPA • Agile • SCRUM

RPA Developer

DB Regio AG | August 2021 - June 2022

- ~~Developed and deployed automation solutions using Python and UiPath, achieving 80% reduction in manual effort with a goal to reach 99% automation.~~
- ~~Delivered solutions for safety-critical systems and DB Regio AG by delivering automation solutions.~~
- ~~Improved data collection accuracy and efficiency.~~

Python • VBA • Excel • UiPath • RPA • Agile • SCRUM

Working Student - Software Developer

Eves-IT | June 2018 - February 2021

- ~~Developed and deployed automation solutions using Python and UiPath, achieving 80% reduction in manual effort with a goal to reach 99% automation.~~
- ~~Delivered solutions for safety-critical systems and DB Regio AG by delivering automation solutions.~~
- ~~Improved data collection accuracy and efficiency.~~

Java • Spring Boot • Spring MVC • JavaFX • Oracle SQL • JUnit • JIRA • Bamboo
Python • VBA • Excel • UiPath • RPA • Agile • SCRUM

Freelance Work

OKAS FLD - Drive & Delivery Services

Business Website Project | 2025

Modern business website for OKAS FLD (drive & delivery services). Built with Next.js (App Router), TypeScript, and Tailwind CSS, responsive, SEO optimized, and 100% (DE/EN/FR). Deployed from GitHub to Render.com with a custom domain via AWS Route 53.

- ~~Developed and deployed automation solutions using Python and UiPath, achieving 80% reduction in manual effort with a goal to reach 99% automation.~~
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ASOK-SE Enterprise Web Application

ASOK-SE SARL | 2024

Comprehensive web application aimed at enhancing enterprise advertisement. Integrated multiple technologies including React, Next.js, TypeScript, and Tailwind CSS, responsive, SEO optimized, and 100% (DE/EN/FR). Deployed from GitHub to Render.com with a custom domain via AWS Route 53.

- ~~Developed and deployed automation solutions using Python and UiPath, achieving 80% reduction in manual effort with a goal to reach 99% automation.~~
- ~~Delivered solutions for safety-critical systems and DB Regio AG by delivering automation solutions.~~
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Local Jenkins Container in VS Code Dev Container

Private Project | 2024

Professional CI/CD development environment with Jenkins configured for Django projects using VS Code Dev Containers. This setup provides a fully configured Jenkins environment with Docker support.

- ~~Developed and deployed automation solutions using Python and UiPath, achieving 80% reduction in manual effort with a goal to reach 99% automation.~~
- ~~Delivered solutions for safety-critical systems and DB Regio AG by delivering automation solutions.~~
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Vivantes Humanitas Web Application

Friend's Project | 2023 - 2024

Django-based web application for Vivantes Humanitas e.V., enabling efficient management of volunteer registrations and activity tracking.

- Designed and implemented a Django-based web application for managing volunteer registrations and activity tracking.

Pentak S&RL International - Enterprise Web Application

Pentak S&RL International | 2021 - 2022

Web application using Laravel/Lumen to manage business operations for a friend's company.

- Implemented a web application with Laravel/Lumen to manage business operations for a friend's company.

PHP • Laravel • Lumen • PHP-Blade • HTML • CSS • JavaScript

Offer Comparison Web Application

Own Initiative | 2020 - 2021

Laravel/Lumen-based application to compare online offers, allowing users to make informed purchasing decisions.

- Designed and developed a Laravel/Lumen-based application for comparing online offers to make informed purchasing decisions.

PHP • Laravel • Lumen • HTML • CSS • JavaScript • Git • GitHub • SQLite

Restaurant Management Application

Initiative with Friends | 2019 - 2020

Laravel/Lumen-based system to streamline restaurant operations, including inventory tracking and order management.

- Developed a Laravel-based system and managed database and operations, including inventory tracking and order management.

PHP • PHP-Blade • Framework • Git • GitHub • Zoom

Hairstyle Business Web Application

Initiative with Friends | 2018 - 2019

Express.js web application to support a friend's hairstyle business by enabling appointment booking and customer management.

- Developed a web application for a hairstyle business, supporting appointment booking and customer management.

Express.js • Framework • MySQL • npm • ngrok • Git • nodemon • babel-node.js

CSK Student Association Web Application

Own Initiative | 2016 - 2017

Web application for the CSK student group at TU Clausthal, facilitating event management and communication among members.

- Designed and developed a web application for event management and communication among members.

Angular • PHP • HTML • CSS • Ionic Cordova • Git

Private Tutoring in Computer Science

Own Initiative | 2014 - Present

Conducted private tutoring sessions to help students master programming languages and databases, focusing on practical problem-solving and real-world application.

- Conducted private tutoring sessions to help students master programming languages and databases, focusing on practical problem-solving and real-world application.

Java • C++ • PHP • Python • SQL • And Q • Neo4j • ArangoDB

Academic Work

Master's Thesis: End-to-End Learning System for Autonomous Drone Navigation

Technical University of Clausthal | 2018 - 2024

This project aimed to revolutionize autonomous drone flight by implementing a cutting-edge end-to-end (E2E) learning system.

- Designed and implemented an end-to-end learning system for autonomous drone navigation, integrating advanced spatial awareness, core navigation, and expanded autonomous navigation capabilities.

Key features include non-planar flight paths, integrated advanced spatial awareness, core navigation, and expanded autonomous navigation capabilities.

Master's Project: Safeguarding Safety-Critical Systems

Technical University of Clausthal | 2021 - 2024

This project focused on analyzing safety-critical systems, with a particular emphasis on drones. As inherently

- Developed and implemented a safety-critical system for drone navigation, ensuring robustness and reliability in safety-critical systems.

Practices associated with the development and safety of these critical systems.

Bachelor's Thesis: Software Architecture Management in the Automotive Sector

Technical University of Clausthal | 2013 - 2018

This project centers on Model-Driven Software Development (MDSD), a cutting-edge approach to achieving

- Developed and implemented a model-driven software development (MDSD) approach, integrating advanced spatial awareness, core navigation, and expanded autonomous navigation capabilities.

Key features include non-planar flight paths, integrated advanced spatial awareness, core navigation, and expanded autonomous navigation capabilities.

Bachelor's Project: Smart Beer Bar System

Technical University of Clausthal | 2013 - 2018

This project involved the development of a smart beer bar management system designed to enhance user

- Developed and implemented a smart beer bar management system, ensuring robustness and reliability in safety-critical systems.

Practices associated with the development and safety of these critical systems.

Key features include non-planar flight paths, integrated advanced spatial awareness, core navigation, and expanded autonomous navigation capabilities.

Notable Project: Electric Vehicle Simulator

Technical University of Clausthal | 2013 - 2018

This project focuses on developing an electric vehicle simulator to address key challenges such as range

limitations and energy consumption. The simulator enables users to simulate a trip and receive an evaluation of their driving performance upon completion.

Notable Project: Parking Management System

Technical University of Clausthal | 2013 - 2018

This project addresses the growing challenge of finding parking in crowded urban areas while contributing to

the "Smart City" initiative. The system utilizes a real-time database to track parking spaces, allowing users to easily monitor the availability of parking spaces.

Notable Project: Graph Database Comparison

Technical University of Clausthal | 2013 - 2018

This project involved a comprehensive performance comparison between two leading NoSQL graph databases:

Neo4j and ArangoDB. The project includes a detailed analysis of their strengths and capabilities, determining which offers superior performance for graph-based data management.

Research Assistant - Software Development and Automation

Technical University of Clausthal | April 2021 - 2022

Collaborated with a research team to develop a ROS2-based drone navigation system, improving automation and efficiency in experimental setups.

Research Assistant

Technical University of Clausthal | 2014 - 2018

Assisted in the development of a software tool for automating repetitive tasks, streamlining the research process and reducing human error.

Education

Master of Science in Computer Science

Technical University of Clausthal | 2018 - 2024

Thesis: End-to-End Learning System for Autonomous Drone Navigation

Tools: Python, Pandas, TensorFlow, Keras, AirSim, Git, GitLab

Technical University of Clausthal | 2013 - 2018

Key Achievement: Developed an autonomous drone navigation system reaching level-4 navigation features.

Thesis: Software Architecture Management in Automotive Sector

Completed Coursework: Automation Engineering, Embedded Systems Modeling

Tools: Java, Eclipse, UML, GMF/EMF

Personal Growth: Advanced proficiency in Python, Pandas, Keras, and Scikit-learn through academic projects.

Key Achievement: Designed and implemented a custom software architecture tool supporting Model-Driven

Location: Cameroon

Architecture for safety-critical systems.

Additional Achievement: Learned German language after graduation and obtained the highest language level

certificate. Completed Coursework: Software Engineering, Distributed Systems, Database, Embedded Systems, Logic and

Technical Skills

Verification, Software Ergonomic

Personal Growth: Proficiency in Java, UML, and GMF/EMF modeling for tool development.

Python (95%)

Java (90%)

JavaScript (85%)

TypeScript (80%)

PHP (85%)

C++ (85%)

VBA Excel (90%)

Frameworks & Tools

UIPath (95%)

Django (90%)

Spring Boot (85%)

Next.js (80%)

React Native (80%)

Laravel (85%)

TensorFlow (75%)

Databases

PostgreSQL (90%)

MySQL (85%)

Oracle SQL (85%)

SQLite (85%)

Neo4j (75%)

ArangoDB (75%)

DevOps & Cloud

Git (95%)
Docker (85%)
Jenkins (80%)
Maven (90%)
AWS (70%)
CI/CD (80%)

Featured Projects

RPA Automation Solutions

Developed comprehensive automation solutions using Python and UiPath, achieving 80% reduction in manual effort for data processing and visualization tasks.

OKAS PLD Business Website

Modern Business Website built with Next.js, TypeScript, and Tailwind CSS. Features responsive design, multi-language support, and professional UI/UX.

Vivantes-Humanitas Web Application

Django-based web application for Vivantes Humanitas e.V., enabling efficient management of volunteer registrations and activity tracking.

Pentak Sarl International Website

Professional business website for Pentak Sarl International, featuring modern design, responsive layout, and comprehensive company information.

Autonomous Drone Navigation

End-to-End Learning System for autonomous drone navigation using Python, TensorFlow, and AirSim simulation, achieving Level 4 navigation capabilities.

Software Architecture Tool

Custom software architecture tool supporting Model-Driven Architecture for automotive sector, improving development efficiency in safety-critical systems.

Cross-Platform Mobile Apps

Full-stack, cross-platform mobile applications using TypeScript, React Native Expo, with Java Spring Boot, Python Django, and PHP Laravel backends.