

CLAYTON GWAVA

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ARTIFICIAL INTELLIGENCE ENGINEER

Forward-thinking AI Engineer with nearly 4 years of experience designing and deploying intelligent systems in telecom, including ML pipelines, GenAI applications, and LLMs. Proficient in transfer learning, prompt engineering, vector search, and real-time deployment. Experienced across the SDLC in Agile environments, with a strong focus on integrating AI into enterprise systems using scalable CI/CD pipelines. Certified AWS Solutions Architect Associate, Google ML Engineer, TOGAF Practitioner, and PRINCE2 Agile. Additionally, spent 2 years as a Core Systems Engineer, designing scalable architectures and optimizing network performance.

• Machine Learning Lifecycle Management • LLM Integration • Predictive Modeling & Evaluation • Enterprise Architecture Alignment • Data-Driven Decision Making • Feature Engineering & Data Preparation • CI/CD • Agile Delivery & Iterative Development • Model Deployment & Operationalization • Generative AI Solution Design

Languages: Python, Java

Web Frameworks: FastAPI, Flask

Frameworks: Keras, TensorFlow, PyTorch, Hugging Face Transformers, Scikit-learn

Databases: MS SQL, MongoDB, Oracle, MySQL

Design Patterns: Pipeline pattern, Model-View-Controller pattern

SDLC: Agile (Scrum)

Tools: Anaconda, JupyterLab, Scikit-learn, XGBoost, TensorFlow / Keras, PyTorch, Hugging Face(Hub, Transformers), OpenAI API, LangChain, Ollama, LangGraph, Google Vertex AI, SageMaker, Flask / FastAPI, Docker, Kubernetes, ngrok

Platforms: Windows, Linux, Amazon Web Services (AWS), Google Cloud Platform (GCP), Microsoft Azure

Big Data: Hadoop, Hive, Spark

Application/Software: Cloudera Platform

PROFESSIONAL EXPERIENCE

CAREER NOTE: Completed on-campus studies and currently taking distance education courses to complete a **Master's Degree in Computer Science** (Available for full-time, W-2 employment).

ECONET WIRELESS ZIMBABWE, Harare, Zimbabwe • 06/2019 – 10/2024

Leading Telecom and tech company, delivering mobile, internet, and fintech solutions to over 50 million subscribers.

AI Engineer (05/2021 – 10/2024)

Developed and deployed AI systems across various sectors, including churn prediction and segmentation, using Python, TensorFlow, and FastAPI, collaborating cross-functionally to improve accuracy and efficiency.

- Led product demos and solution presentations for internal and external enterprise clients, aligning solutions to their business needs and technical challenges, which led to improved understanding, executive buy-in, and faster adoption of AI/ML platforms.
- Built a predictive maintenance platform using scikit-learn, PyTorch, and Databricks, cutting maintenance costs 20% and increasing uptime.
- Developed an explainable churn prediction model with SHAP, scikit-learn, and XGBoost, enabling targeted retention campaigns that improved retention by 15%.
- Implemented a real-time recommendation engine using collaborative filtering, OpenAI embeddings, and TensorFlow Recommenders, increasing cross-sell revenue 10%.
- Created an AI chatbot with GPT-4o and LangChain, handling 60% of tier-1 inquiries, reducing support load and improving resolution time and CSAT.
- Deployed a voice transcription system using OpenAI Whisper, AWS Bedrock, and SpeechBrain to transcribe and analyze parliamentary proceedings, cutting manual transcription effort by 40%.

Core Systems Planning Engineer (06/2019 – 05/2021)

Designed and optimized core telecom network infrastructure, leading capacity planning, performance analysis, and integration to improve scalability, reliability, and compliance while minimizing downtime.

- Served as the primary technical liaison by engaging internal stakeholders to gather system requirements and coordinating with external vendors to evaluate third-party solutions, ensuring technical alignment and driving successful vendor selection for enterprise systems
- Fine-tuned network configurations using real-time performance monitoring tool Grafana to reduce latency and enhance overall user experience.
- Led a core network upgrade initiative using scalable architecture and tools like Ansible, completing the transition with minimal downtime and ensuring uninterrupted service.
- Developed and executed cost-reduction strategies through resource capacity planning in Excel/Power BI and vendor negotiations, reducing operational expenditures by 20%.
- Engaged vendors by presenting detailed technical and business requirements, actively participated in product evaluations, and influenced vendor selection decisions to ensure chosen solutions met internal performance, integration, and scalability needs.

Technologies Used: Python, JupyterHub, Cloudera, Infobip, OpenAI APIs, Hadoop, hive, GCP, Jira, Zabbix, Netflow.

ACADEMIC PROJECTS

Blog Management System (Maharishi International University 2025): Leveraged microservices and layered architecture and utilized React, TypeScript, MySQL, React, Tailwind CSS, Spring Boot (Hibernate, Security, Cloud Config), PostgreSQL.

Chinhoyi University of Technology (2022)

AI-Powered Customer Churn Prediction System: A system to help businesses anticipate customer attrition and implement proactive retention strategies. This system utilized machine learning to analyze historical customer data and predict the likelihood of churn. The system interfaced with a Python-based machine learning model trained with TensorFlow for accurate predictions. Utilized MySQL, Apache Kafka, Python, TensorFlow, RESTful API, Git.

EDUCATION

Master of Science in Computer Science

(In progress via distance education; expected completion 06/2027)

Maharishi International University, Fairfield, Iowa

Key Courses: Web Applications Programming, Algorithms, Enterprise Architecture, Cloud Computing

Master of Science in Big Data Analytics

Chinhoyi University of Technology, Chinhoyi, Zimbabwe (06/2022)

Key Courses: Statistical Analysis, Big Data Analytics, Big Database management and warehousing, machine learning techniques, analytics of programming, business intelligence analytics.

Bachelor in Electrical Engineering

University of Zimbabwe, Harare, Zimbabwe (06/2017)

CERTIFICATIONS

[AWS Solutions Architect Associate](#) (06/13/2025)

[Google Cloud - Professional Machine Learning Engineer Certification](#) (01/2025)

[TOGAF 9 Practitioner](#) (12/2021)

[Agile Project Management - PRINCE2 Agile®](#) (11/2021)

[Applied Data Science I: Scientific Computing & Python - with honors](#) (06/2020)