#### ADDISI NICHOLAS HISRICH

# Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana

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#### **EDUCATION**

Kwame Nkrumah University of Science and Technology (KNUST)

**Sept 2025** 

Doctor of Veterinary Medicine

Thesis Advisor: Prof. Benjamin Emikpe

Relevant Courses: Epidemiology, Virology, Pathology, Statistics, Algebra, Immunology

#### RESEARCH EXPERIENCE

## **Undergraduate Final Year Thesis Project**

Jan-Sept 2025

• Principal Investigator: Prof. Benjamin Emikpe

Project: Comparative Seroprevalence of Leptospira spp in Hunting Dogs: A Study of Kumasi and Tamale

- I collected and tested blood samples from hunting dogs using ELISA to detect antibodies against *Leptospira spp*
- I conducted statistical analysis with SPSS to compare seroprevalence rates between Kumasi and Tamale
- I evaluated potential zoonotic risks and contributed to recommendations for regional disease surveillance

### Research Laboratory Assistant (Intern), Kumasi Veterinary Laboratory, Kumasi

**Oct-Nov 2023** 

• **Principal Investigator:** Dr. Patrick Amponsah

Project: Microscopic Identification of Gastrointestinal Parasites in Cattle through Fecal Floatation

- I collected, labelled and prepared fecal samples from cattle
- I conducted fecal flotation and microscopic examination to identify parasites
- I supported veterinarians in interpreting lab results and making clinical decisions

#### TECHNICAL PROJECTS

## **Diabetes Prediction Web App**

Jan 2025

- Developed a Streamlit web app using XGBoost to predict diabetes risk based on health data, featuring preprocessing, class imbalance handling and model optimization
  - Tools: Python, Scikit-learn, XGBoost, GitHub, Matplotlib, Seaborn, Streamlit
  - GitHub Link: <a href="https://github.com/Hisrich/Diabetes\_ML\_Model">https://github.com/Hisrich/Diabetes\_ML\_Model</a>

# **Pet Adoption Predictor**

**Dec 2024** 

- Used XGBoost to predict pet adoption likelihood using a Kaggle dataset. Achieved 78% accuracy and visualized insights in Power BI
  - Tools: Python, Scikit-learn, XGBoost, Power BI, GitHub
  - GitHub Link: https://github.com/Hisrich/Pet Prediction Model

### **Pedmonie: Secure Payment Solution**

Mar 2024

- Built APIs with Django and implemented CI/CD pipelines for smooth deployment
  - Tools: Python, Django, Django REST Framework, MySQL, GitHub Actions
  - GitHub Link: https://github.com/InternPulse/pedmonie-django-backend

#### WORK EXPERIENCE

## Clinical Veterinary (Intern), KNUST Veterinary Teaching Hospital, Kumasi

Oct-Dec 2024

• I assisted in diagnosing and treating small animals (vaccination, deworming, wound care)

- I monitored patient vitals and updated clinical records
- I administered medications and collected blood, fecal and urine samples

# Research Laboratory Assistant (Intern), Kumasi Veterinary Laboratory, Kumasi

Oct-Nov 2023

- I collected, labelled and prepared biological samples for diagnostic testing
- I conducted fecal flotation and microscopic examination to identify parasites
- I supported veterinarians in interpreting lab results and making clinical decisions

### Backend Development (Intern), InternPulse, Remote

Jan-Mar 2025

- I developed Pedmonie a secured and seamless payment webapp alongside other interns
- I developed a payment gateway API using Flask, integrating Paystack for transactions
- I created comprehensive API documentation, enhancing usability and integration

### **CERTIFICATIONS & COURSES**

Google Advanced Data Analytics – Coursera	Mar 2025
Intermediate Machine Learning – Kaggle	Nov 2024
Communication for Veterinary Practice – Livisto Group GmbH	Oct 2024
Infectious Disease Transmission Models for Decision-Makers – Coursera	Oct 2024
Introduction to Clinical Research – Global Health Network	Oct 2024
Python Programming – Slightly Techie School	Sep 2024

### CONFERENCES AND WORKSHOPS ATTENDED

Harnessing Generative AI for Healthcare Innovations	June 2025
Cracking the Climate Change Code	May 2024

### LEADERSHIP/VOLUNTEERING

Anti-Rabies Awareness Campaign	April 2025
COVID-19 Ambassador, Swedru Municipal Hospital	May-Oct 2020

## **SKILLS**

- **Programming:** Python, SQL
- ML Libraries: Scikit-learn, XGBoost, TensorFlow, PyTorch, Keras, Pandas, NumPy
- Laboratory Skills: ELISA, Light Microscopy, Microbial culturing, Biochemical assay
- Data Analysis & Visualization: SPSS, Excel, Power BI, Matplotlib
- Tools: Git, VS Code, Jupyter, Flask, Django, Telebot
- Communication: Strong written and oral presentation skills

PROFICIENT LANGUAGES: English, Fante, Twi