

Charles Nana Kwakye

Address: Geel, 2440 Belgium

Email: charleskwakye1111@gmail.com

Phone: +32495376789

Date of Birth: 16/06/2002

Portfolio: <https://www.charlesnanakwakye.works/>



Education

Thomas More University | Geel, Belgium

Applied Computer Science, Artificial Intelligence | July 2025

Professional Experience

VRT Internship | Brussels, Belgium

Artificial Intelligence Intern | Jan 2024 – Mar 2024

- Conducted an in-depth feasibility study on leveraging advanced large language models (LLMs) for automating the generation of DBT (Data Build Tool) documentation, addressing VRT's undocumented DBT codebase
- Collaborated with data engineers to iteratively refine my solution, I then integrated this feedback to enhance the accuracy and usability of the generated documentation
- Utilized advanced NLP techniques and tools, such as transformer architectures, embeddings and tokenization, to optimize the model's output and relevance to VRT's dbt documentation

Bleckman | Grobendonk, Belgium

Order Picker | Nov 2021 – Present

- As an order picker at Bleckmann, I was responsible for receiving and processing incoming orders, ensuring their accuracy and completeness. I also had to meet the productivity requirements which is above 240 orders every two hours, as measured by a productivity measuring tool
- I utilized a scanner system to locate and pick the required items according to the provided order list. I ensured that the items were picked accurately and efficiently, meeting the productivity requirements

- With patience and attention to detail, I trained two new workers on how to use the scanner system and pick orders accurately

Cybercity iCafe | Konongo, Ghana

Personal Assistant | Jun 2017 – Mar 2018

- I helped students who were less familiar with the internet and computer applications to navigate and utilize these tools effectively. This included teaching them how to browse the web, use email, and other essential computer skills
- I used a token generator to create voucher tokens that were sold to customers. These tokens allowed access to internet
- I helped customers with software-related issues, such as installing antivirus software and performing operating system installations. I ensured that their computers were running smoothly and securely

Featured Projects

Airbnb Accommodation Insights: Interactive Data Journalism Platform

Technologies: *Qlik Sense, JavaScript, HTML, CSS, StarUML*

- Developed a data journalism web application providing insights into Airbnb listings across Antwerp, Brussels, and Ghent to assist tourists in finding suitable accommodations
- Created interactive visualizations in Qlik Sense showcasing average nightly rates, property types, and seasonal demand patterns, then built a responsive frontend with HTML, CSS, and JavaScript that integrates these dashboards with user-friendly filters
- Transformed complex accommodation data into easy-to-understand stories through data journalism techniques and collaborated with Epic Data employee to validate the design and enhance user experience

E-Commerce Data Lakehouse: Production-Grade Data Engineering

Technologies: *Azure Databricks, Delta Lake, PySpark, Unity Catalog, ADLS Gen2, Azure Key Vault*

- Built a production-ready medallion architecture data lakehouse transforming 100,000+ raw e-commerce records from nine interconnected CSV files into business-ready analytics using Bronze, Silver, and Gold layers on Azure Databricks
- Implemented intelligent control table pattern enabling both historical backfills and incremental processing, with automated orchestration using Databricks Workflows that processes years of historical data in one run and handles new monthly data efficiently
- Designed hybrid star schema with bridge tables to handle complex many-to-many payment relationships, created customer aggregation tables, and delivered cost-effective cloud architecture with managed identity authentication and auto-termination controls within student budget constraints

Data Modelling Project

Technologies: *Laravel, Axure RP, ERD Design*

- Worked together with three other students to model an Entity Relationship Diagram (ERD) for a Laravel application designed to help a private household schedule tasks and manage their documents and invoices
- Analyzed and interpreted the requirements provided by three coordinators to create an accurate and comprehensive ERD. This involved understanding the needs of the client and translating them into a functional design screen using Axure RP
- Created use cases and screens as part of the analysis and design process. These artifacts helped visualize the functionality and user interface of the application. The use cases provided a detailed understanding of how the application would be used, while the screens showcased the visual design

Certifications & Professional Development

- **Qlik Sense Business Analyst Qualification** - [View Certificate](#)
- **Microsoft Azure for Databricks** - [View Certificate](#)
- **Microsoft Azure Data Fundamentals** - [View Certificate](#)
- **DBT Fundamentals** - [View Certificate](#)
- **Databricks Fundamentals** - [View Certificate](#)

Technical Skills & Languages

Technical: Machine Learning, Large Language Models, Data Engineering, Data Visualization, Full Stack web development

Language:

- English (Advanced)
- Twi (Native)
- Dutch (Beginner)
- **Currently Studying:** A2 Dutch