



Phastar Case Study

Meet the Fellows



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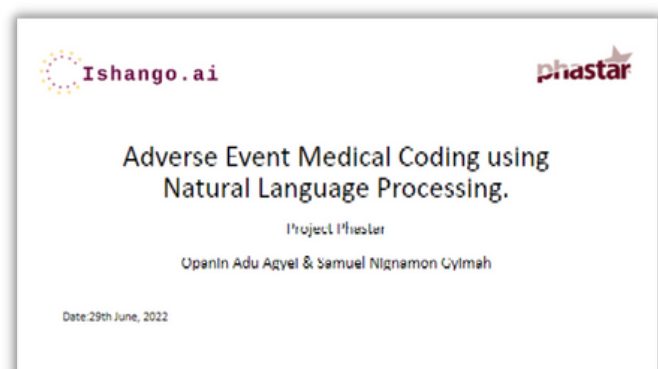
"I have expanded my knowledge in data privacy, working in a team and working with an international company." – Opanin Agyei Adu

The Host Company

Phastar is a global data-focussed contract research organisation (CRO). They work with small and large biotechnology, pharmaceutical and medical companies to provide statistical consulting, analysis and reporting, clinical data management and data science services. Data is key to what they do, whether it is clinical trial data, metadata or real-world data. The data is subject to inspection and scrutiny by regulatory agencies, and quality and data integrity are paramount.

Project Brief

Coding verbatim medical terms is highly time-consuming for Phastar analysts. Ishango.ai fellows were tasked with developing an automated Natural Language Processing (NLP) solution to identify and recommend the most similar Low Level Terms (LLTs) for every verbatim term. The goal of the project was to free up a significant amount of time for Analysts to focus on other value-adding work.





Phastar Case Study



'It was useful to gain input and insight from a different perspective, the Ishango team provided interesting ideas and solutions for the problem.'

"The fellows were engaged and enthusiastic from the start of the project, explaining their ideas and asking some challenging, insightful questions throughout which was great."

Jennifer Bradford
Lead Data Scientist

Project Outcomes

- Pre-processing of verbatim terms via stemming, lemmatizing, spell correction, and removing stop words
- Natural Language Processing (NLP) to "understand" and recommend verbatim terms to LLTs by applying three methods: Exact Matching (66% accuracy), Term frequency using TF-IDF (80% accuracy) and S-BERT Deep Learning Transformer Model (90% accuracy)
- Identification of human errors in the manual coded data
- Behind-the-scenes work such as code reviews with Snr. Data Scientist to meet high-quality software development standards

About Ishango

Ishango is an innovative social enterprise with a mission to create high-skill data science jobs in Africa. We recognise the potential in the best graduates and nurture their talent in line with business needs. Since our launch in 2021, we have connected budding data scientists from across Africa to projects around the world.



Employment

80% employment rate after fellowship



Diversity

40% of fellows have been women



Mentorship

1100+ hours of mentorship from senior data scientists