

Ladies and Gentlemen,

I am writing to express my interest in the position of AI Data Engineer at your company. Currently, I am a third-year student at the École des Mines de Nancy, pursuing a Master's in Civil Mining Engineering (Bac +5) with a specialization in Big Data within the Department of Industrial Engineering and Applied Mathematics. I am currently completing my final internship at Valtech.

Throughout my academic journey, I have developed a keen interest in data manipulation, which is a fundamental skill for tasks related to data analysis. My education in data science and engineering has equipped me with advanced programming skills, particularly in Python (numpy, pandas, sklearn, Pytorch, tensorflow), SQL, R, and Matlab, as well as proficiency in data visualization tools such as PowerBI, Tableau, seaborn, and matplotlib.

I have had the opportunity to apply these skills in various academic projects, including fraud detection, machine learning-based pricing, and time series prediction. Additionally, during my first research laboratory internship, I explored natural language processing (NLP) using Transformers and the handling of large datasets. I also worked on a project in partnership with CHR Metz-Thionville, where I successfully detected periapical lesions in dental radiography images using state-of-the-art Computer Vision models.

My internship at Valtech has been a rewarding experience as I have been involved in an end-to-end data science project, from data extraction, cleaning, and transformation of image and text data to the utilization of advanced multimodal models to create a specialized fashion product search engine. This search engine will be deployed in an application that will make use of these data and models, providing direct access to users. This experience has allowed me to gain a deep understanding of both the world of data and client needs, as well as an introduction to cloud computing through Azure Cosmos DB services.

I am convinced that my experience, analytical skills, and proficiency in handling various data types (structured, unstructured, and semi-structured) make me an ideal candidate to contribute effectively to your teams. I am enthusiastic about the prospect of joining an ambitious company where I can thrive in a stimulating environment and continue learning about the latest advancements in data science. I would be honored to apply my knowledge and skills to benefit your team and actively contribute to your projects.

Thank you for considering my application. I look forward to your response and am available for any additional information you may require.

Yours sincerely,

Louzali Achraf