

# SENHADJI NIHAD

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Data Scientist with two and a half years of experience and expertise in machine learning, Generative AI, and NLP to optimize processes and solve complex problems. Skilled in creating scalable, data-driven solutions to address business challenges. Committed to delivering impactful results.

## EDUCATION

<b>MASTER Of Applied Statistics and Probability</b>	<b>June 2022</b>
University of Science and Technology Houari Boumediene.	
<b>Bachelor Of Probability and Statistics</b>	<b>June 2020</b>
University of Science and Technology Houari Boumediene.	

## PROFESSIONAL EXPERIENCE

<b>DATA ANALYST, DATA OFFICE, BNP PARIBAS EL DJAZAÏR</b>	<b>Dec 2023 – Present</b>
<ul style="list-style-type: none"><li>Implemented a web application using the GPT4-Turbo (LLM) to automate the translation of Arabic written names into French, then determine their existence within our client data base, the framework of a regulatory activity related to garnishment and judicial prohibition. The process, previously handled manually by 4 staff to manage over 300 names per day, was optimized to 3 minutes.</li><li>Developed and deployed a write bot using Chat gpt LLM to automate bank procedure updates during core banking system transitions, generating accurate and up-to-date procedures without human intervention. reducing the team size from five to one and significantly improving efficiency.</li><li>Developed and implemented a RAG chat bot powered by Azure Open AI to streamline procedural query resolution using GPT-4o LLM. The bot provided precise, automated responses by referencing specific sections of documentation, eliminating the need for manual interactions. This initiative enhanced operational efficiency, reduced manual search efforts by 50%.</li><li>Led data quality assessments by executing data extraction, cleansing processes, and establishing data control workflows to uphold data integrity.</li><li>Implemented Key Performance Indicators (KPIs) to evaluate and enhance data quality, delivering monthly detailed files containing all data anomalies to each department to facilitate their data remediation programs, ensuring that all bank data is reliable and accurate.</li><li>Designed and implemented a regulatory NLP-based system to identify similar names between the client database and the unstructured "List of individuals barred from issuing cheques" provided by the Bank of Algeria, reducing manual processing time from one week to 15 minutes and improving operational efficiency.</li></ul>	
<b>ENTITY ADMINISTRATIVE FUNCTIONS MANAGER, BNP PARIBAS EL DJAZAÏR</b>	<b>Dec 2022 - Dec 2023</b>
<ul style="list-style-type: none"><li>Built a fraud detection system utilizing graph theory and Louvain algorithm, uncovering 24 million euros of illicit capital movement, and quarterly delivery of reports encompassing all detected communities to enhance financial security.</li><li>Developed a Customer Churn Prediction system that empowered bank agencies to proactively engage clients with high churn rate. Leveraged supervised machine learning models such as Random Forest and SVM, achieving a predictive accuracy improvement from 65% to 85%. Enhanced client retention strategies by recommending tailored products and feedback.</li><li>Implemented sensitivity level detection for client activities using semantic similarity clustering algorithms, by leveraging BERT word embeddings model. Categorized activities into low, medium, high, and very high sensitivity levels, facilitating informed decision-making and enhancing risk assessment.</li></ul>	
<b>DATA SCIENTIST INTERN, YASSIR EXPRESS</b>	<b>November 2021 - July 2022</b>
Created Restaurant Recommendation Systems with Python for <b>YASSIR EXPRESS</b> .	
<ul style="list-style-type: none"><li>Incorporating a KNN-based Neighborhood Recommendation System (user-based and item-based) with multiple similarity metrics, Popularity-based Recommendation System, and a Location-based leveraging K-means clustering and Haversine distance.</li></ul>	
<b>DATA SCIENTIST INTERN, AYRADE COMPUTER SERVICES COMPANY</b>	<b>July 2021 – February 2022</b>
<ul style="list-style-type: none"><li>Developed an Annual Dashboard and Reports using Power BI.</li><li>Constructed a Regression Model for Predicting Annual Sales Revenue.</li><li>Established a Non-relational Database using MongoDB.</li></ul>	
<b>DATA SCIENTIST INTERN, SIRIUS NET SOFTWARE DEVELOPMENT COMPANY</b>	<b>June 2021 - February 2022</b>
<ul style="list-style-type: none"><li>Designed and implemented a responsive website utilizing Bootstrap, HTML, and CSS.</li><li>Database management tasks using PhpMyAdmin</li></ul>	
<b>DATA ANALYST INTERN, ELIT EL DJAZAÏR INFORMATIONS GROUPE SONALGAZ</b>	<b>April 2019 - October 2019</b>
<ul style="list-style-type: none"><li>Established databases and conducted data interpretation to drive meaningful insights using SQL</li></ul>	

## ***TECHNICAL SKILLS***

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**Programming languages** (Python, Java, C/C++, SQL , MATLAB , R, PHP, JavaScript, HTML, CSS, Bootstrap)

**DBMS** (MySQL, FILEZILLA, PostgreSQL, XAMPP and MangoDB, Postman)

**Data visualization** (Altyrex, Tableau, Matplotlib, Seaborn, and Plotly )

**Frameworks:** Node. js, Flask API , Django, Streamlit

**Developer Tools:** Git, Gitlab, Jenkins, Docker.

**Other:** Power BI, Microsoft Office, HUBSPOT, CRM

## ***ACADEMIC PROJECTS***

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- Heart Failure Disease Prediction Project using unsupervised Machine learning technique Kmeans Clustering.
- House price prediction Project using unsupervised Machine learning technique Linear Regression.

## ***CERTIFICATIONS***

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- AI Agent Fundamentals certificat Hugging Face.
- Advanced Retrieval for AI with Chroma certificat DeepLearning.AI.
- Building Applications with Vector Databases certificat DeepLearning.AI.
- Large Language Models with Semantic Search certificat DeepLearning.AI.
- Multi AI Agent Systems with crewAI certificat DeepLearning.AI.
- Coursera IBM machine learning professional certificat.
- Microsoft Azure Develop Generative AI solutions with Azure OpenAI Service certificat.
- Microsoft Azure Build a question-answering solution certificat.
- Microsoft Azure Prepare for AI engineering certificat.
- DeepLearning AI Neural Networks and Deep Learning certificat.
- DeepLearning AI Natural Language Processing with Sequence Models certificat.
- DeepLearning AI Natural Language Processing with Probabilistic Models certificat.
- DeepLearning AI Natural Language Processing with Attention Models certificat.
- Coursera Generative AI with Large Language Models certificat.
- Coursera Natural Language Processing Specialization certificat.
- Coursera Natural Language Processing with Classification and Vector Spaces certificat.
- Coursera IBM Deep Learning and Reinforcement Learning certificat.
- Coursera IBM Supervised Machine Learning: Classification certificat.
- Coursera IBM Supervised Machine Learning: Regression certificat.
- Coursera IBM Unsupervised Machine Learning specialization certificat.
- Coursera IBM Exploratory Data Analysis for Machine Learning certificat.
- Coursera IBM Machine Learning Capstone certificat.
- Machine Learning by Stanford University Cours Coursera.
- Google Fundamentals of Digital Marketing Google certificat.
- MongoDB certificat from Mongo DB University.
- Time series certificat.
- Certified Administrator Domino Data Lab.
- Certified Data Science Practitioner Domino Data Lab
- Sololearn Certified Python Core, HTML, CSS.

## ***CORE STRENGTH***

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- Team Leader.
- Strong Communication skills.

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***LANGUES*** : Arabic, French, English, and Turkish.