

Hasnaa Mohamed Azab

01555458590 | hasnaamo1234@gmail.com | Egypt (Alexandria)

[LinkedIn](#) | [GitHub](#)

Summary

Data Analyst & Scientist with expertise in transforming complex data into actionable insights. I specialize in analyzing data to uncover patterns and opportunities, creating clear and engaging visual reports, and building machine learning models for prediction and smart decision-making, helping organizations move from raw numbers to strategies that drive success.

Experience

Data Engineering Intern

July 2025 - Present (Current)

DEPI, Skills Dynamix, Alexandria

- ✎ Gaining hands-on experience in building and monitoring dynamic data pipelines in real-world projects.
- ✎ Learning and applying Python, SQL, NoSQL, ETL processes, and web scraping to manage and transform data effectively.
- ✎ Supporting data flow, transformation, and storage while improving infrastructure reliability.
- ✎ Developing strong problem-solving and time management skills in a professional environment.

Software Testing Intern

July 2025 – September 2025

Faculty of Computer and Data Science, Alexandria University

- Gained knowledge of software testing fundamentals, including testing roles, processes, and principles.
- Studied Agile methodologies such as Scrum and Kanban, focusing on their concepts and use in project workflows.
- Used Trello in a simulated setting to understand task management within Agile frameworks.

Education

Bachelor of Computer and Data Science – Alexandria University

Expected Graduation: 2027

- CGPA: Excellent (in progress)

Skills

Programming: Python, R, Java, C++

Data Science: Data Analysis, Machine Learning, Data Mining

Concepts: Mathematics, OOP, Data Structures ,ETL

Tools: Microsoft SQL Server, PowerPoint, Trello , NOSQL ,Excel ,Canva

Soft Skills : Communication, Teamwork, Adaptability, Creativity, Continuous Learning

certifications

- AI Hackathon – Google Developers Group, Alexandria (2025) :
Participated in a one-day hackathon, working under pressure to develop an MVP and present an innovative idea within a limited timeframe.

Projects

- **climate analysis**

Project description : Performed API-based data collection, preprocessing, exploratory data analysis, and model training (LSTM reached 91.6% accuracy). Visualized spatiotemporal changes using TimestampedGeoJson to highlight climate patterns across Egypt.

My role: Built ML models (LSTM, Random Forest) to predict temperature using environmental data.

- **Multiple Machine Learning Projects**

Project description: Applied regression, logistic regression, KNN, SVM, and neural networks to real-world datasets. Used Random Forest and SMOTE to improve model accuracy and handle class imbalance. Focused on solving overfitting/underfitting and tuning models for better generalization. Covered full ML pipeline: data preprocessing, modeling, evaluation, and deployment demos.

My role : Apply a lot of models with different data.

- **Crime Data Analysis - San Francisco**

Project description : Analyzed over 1M crime records using Logistic Regression, Random Forest, and clustering (K-Medoids, Hierarchical) to uncover crime patterns. Performed data cleaning, EDA, feature selection, and clustering optimization using Genetic Algorithm; identified 3 crime hotspots. Provided actionable recommendations to enhance public safety based on model insights and spatial analysis.

My role : Performed clustering optimization using Genetic Algorithm.