Mohammed Elkhiat

mailto:mohammed.khayyat02@eng-st.cu.edu.eg | (+20) 11 2503 6915 | GitHub | LinkedIn
Cairo, Egypt

Summary

I am a highly motivated, detail-oriented, and ambitious individual with a strong passion for machine learning and data science. I am excited about the opportunity to collaborate with industry experts and contribute to groundbreaking projects that push the boundaries of technology. I am committed to continuous learning and growth, and I am confident that my dedication and skills make me a valuable asset to any team focused on driving innovation in that field.

Education

Cairo University Faculty of Engineering Aug 2021 - Expected Aug 2026

Computer Engineering Department (GPA 3.5)

Relevant Coursework: Data Structures and Algorithms (C++), Data Base, Probability & Statistics, Linear Algebra, Calculus, Object-Oriented Programing, Linux.

Awards: First place at math research day by TCCD Career Center for the statistics project.

WorldQuant University Mar 2023 - Aug 2023

Applied Data Science Lab

Learnings*:*

- Completed eight projects. Each project consists of four self-paced lessons, followed by a graded assignment.
- In each project, we accessed data from files, SQL and NoSQL databases then cleaned data to prepare training sets
- Built machine learning models for supervised and unsupervised learning tasks using scikit learn.
- Created visualizations to explain data characteristics and model predictions for non-technical audiences.

Projects

Employee Attrition | *Python, Scipy.stats, scikit learn, Pandas, Plotly, Jupyter. Project link*

- Conducted statistical analysis and hypothesis testing to gain insights into the factors contributing to employee turnover.
- Built a machine learning model that accurately predicts the probability of an employee quitting then put a risk level to each.

Search Engine | *Java, MongoDB, JSOUP. Project link*

- Implemented Query Engine and Indexer that is responsible for indexing words with its related pages using some NLP algorithms dealing with NoSQL data base.

Retain Radar web app | *Python, Scipy.stats, Plotly, Streamlit. Project link | Try the demo*

- Deployed the predictive model built in Employee Attrition project as a full web application providing an accessible platform for users to input employee data and obtain attrition predictions in real-time.

Process Scheduler | *C++, Data Structure, OOP. Project link*

- Implemented the algorithm that each processor follow to schedule and process its processes Utilized data structures and OOP concepts to keep the CPU busy as possible and minimize response time and waiting time for processes being scheduled

Skills

Programming Languages: C++, Python, Java, SQL.

Data Manipulation and Visualization: Numpy, Pandas, Matplotlib, Seaborn, Plotly.

Data Science and relevant skills: Machine Learning (Sckit-learn, XGBoost), Hypothesis testing (Scipy.stats), OpenCV, Streamlit, Ensemble methods.

Familiar with: Deep Learning (Tensoflow, Keras), Convolution Neural Networks and Web scraping.

Courses

- Data Science with Python track (23 courses) from DataCamp.
- Machine Learning Specialization from DeepLearning.AI at Coursera.