Esraa Samir Ismail Ahmed

01064660478 | Shoubra , Cairo , Egypt

esraasamir118881@gmail.com

[Esraa Samir | LinkedIn](#)

[EsraaSamir12 (Esraa Samir)](#)

Profile

I am a passionate Data Analysis student with a solid foundation in relational databases, advanced SQL, and data visualization. I am experienced in creating interactive dashboards . I am skilled in data preprocessing, statistical analysis, and applying machine learning techniques to uncover insights. Proficient in tools like Excel, Python, and SQL , Power Bi and Tableau

---

Skills

Technical Skills

- **Databases & Data Management** : SQL, Oracle, MongoDB, Data Warehousing, XML, ETL Concept

- **Data Analysis & Visualization**: Excel, Statistics, Tableau, Power BI

- **Data Analysis Skills**: Data Cleaning, EDA, Data Wrangling, Feature Engineering, Statistical Analysis, Data Visualization , Reporting

- **Programming Languages**: Python, Java, C#, C++, C, PHP; Algorithms, Data Structures, Object-Oriented Programming

- **Machine Learning & Data Mining:** Python (Pandas, NumPy, Scikit-learn), Supervised & Unsupervised Learning, Data Preprocessing, Feature Engineering

Soft Skills

• Problem-Solving

• Communication Skills

 • Teamwork & Collaboration

- Time Management

- Presentation Skills

Education

Computers and artificial intelligence Helwan university   Oct/2022– present

Department: Information System (IS)

Current GPA: 3.65 / 4

Courses

• Digital Egypt Pioneers Initiative   **Jun/2025 – Present**
Currently enrolled in a practical, hands-on course focused on data analysis using Python, statistical techniques, and business intelligence tools. Gaining skills in Python with essential libraries, applying statistical analysis to uncover insights, and practicing SQL for data extraction and analysis. Working with Microsoft Excel for data cleaning and pivot reporting. Designing dashboards with Power BI and Tableau to communicate business insights. Exploring Engineering Prompting to enhance analytical thinking with AI tools. Developing soft skills such as teamwork, communication, and time management. Attending freelancing workshops to learn how to build an online career.

• Information Technology Institute   **Nov/2024 –Sep/2025**
Completed a comprehensive BI Development training program that integrated technical and analytical skills using various tools and platforms. Gained strong proficiency in SQL and advanced SQL for complex data querying. Applied Data Warehousing (DWH) concepts and implemented ETL processes using SSIS. Used statistical techniques to support data-driven decisions. Leveraged Microsoft Excel for advanced cleaning and reporting. Designed dashboards using Power BI and Tableau, and built SSRS reports for operational and analytical needs. Worked with SSAS to develop multidimensional and tabular models. Participated in projects simulating real-world business pipelines.

• MEC Academy   **Aug/2024 –Jul/2025**
Completed hands-on training in data analysis using Python, statistics, and BI tools.

Acquired solid skills in Python for data manipulation, applied statistical methods to interpret data trends, and used SQL to query relational databases. Utilized Excel for data cleaning and reporting, and created dashboards in Power BI. Completed end-to-end projects involving data collection, analysis, visualization, and reporting.

Languages

- Arabic – Native

- English – B2

Projects

- **University Management System – PL/SQL Project**
  Developed a university management system using PL/SQL to automate academic and administrative processes. Managed core entities such as PROFESSORS, STUDENTS, EXAMS, and REGISTRATION. Created stored procedures and triggers to handle student registration, manage exam results, and issue attendance-based warnings. Handled deadlocks and blocking issues using proper transaction management and locking mechanisms. Implemented an AUDITTRAIL table to log errors and track user actions for accountability. Generated dynamic reports to analyze student performance and academic progress.
  GitHub: https://github.com/EsraaSamir12/University-Exam-Management-System

- **Market Analysis**
  Performed market analysis using Apriori and FP-Growth algorithms to uncover frequent itemsets and association rules in transaction data. Key tasks included data preprocessing, generating frequent itemsets, and extracting actionable insights from consumer behavior. The project provided recommendations for product bundling and marketing strategies.
  GitHub: https://github.com/EsraaSamir12/Market-Basket-Analysis

- **Salary Prediction**
  Predicted employee salaries using three models: Linear Regression, Decision Tree, and Random Forest. Processed input features such as age, experience, gender, education, and job title. Applied comprehensive data preprocessing techniques, including encoding categorical variables and scaling numerical features, to ensure

accurate predictions. Implemented entirely in Python using Pandas, NumPy, scikit-learn, and Matplotlib/Seaborn for data preprocessing, model building, and visualization.
GitHub: https://github.com/EsraaSamir12/Salary-Prediction

- **Excel-Based Sales & Product Analytics Dashboard**
Cleaned and prepared raw sales data: handled missing values, standardized inconsistent entries, and normalized categorical fields (Category, Subcategory, Brand, Country). Engineered new features to enhance analysis, including: Delivery Method, Delivery Duration (order vs. delivery date), and Customer Age (calculated from birthdate). Built a structured data model (Snowflake Schema) in Excel using multiple related tables, including a custom Date Dimension for advanced time analysis. Performed in-depth exploratory analysis using PivotTables and PivotCharts, uncovering key insights: top-spending customers, best-selling products, brand performance, and sales distribution by geography. Designed a clean, interactive Excel dashboard with consistent color themes and slicers for storytelling and clear data-driven decision-making.
GitHub: https://github.com/EsraaSamir12/DEPI/blob/main/Excel/Orders.zip