Aya Shaker Selim

Personal Contacts:

» **Email**: Aya.shakir6789@gmail.com, aya.selim@queensu.ca
» **Phone**: 01065243029
» **LinkedIn**: https://www.linkedin.com/in/aya-selim/
» **Portfolio**: https://github.com/ayaselimm

Education:

B.Sc. of Computer Science – Faculty of Computer Science Tanta University
September 2014 – June 2018
- » Major: Computer Science
- » Total Grade: Very Good
- » Graduation Project Grade: Excellent grade

M.Sc. of Computing and Information Sciences – Queen's University of Canada
January 2024 – December 2024
- » Major: AI and Data Science
- » Main Courses (Cloud Computing – Big Data – Machine Learning – Reinforcement learning – Data Analytics – Data Mining)
- » Thesis: Job Recommendation System With Wuzzuf.

Experience:

Machine Learning Internship | Wuzzuf Company
Sep 2024 – Dec 2024

→ Develop a collaborative filtering-based system to recommend jobs to users based on their preferences

AI and Data Science Instructor | Digital Egypt for Investment – Egypt
November 2022 – Present

→ Deliver courses on Python, ML, and AI tools (TensorFlow, SQL); mentor students in practical projects and align the curriculum with industry trends.

Programming Instructor | Yat Learning Center
June 2020 – Present

→ Teach Python, C++, Java, and Flutter for mobile app development; mentor students through hands-on projects and align the curriculum with industry standards.

Android Developer | Orange company
Dec 2019 – March 2020

→ Developed and maintained Android applications using Java/Kotlin, collaborating with cross-functional teams to deliver user-centric features.

→ Optimized app performance, resolved bugs, and ensured code quality through rigorous testing and code reviews.

Languages:

• Arabic: Mother Language
• English: Excellent

s

Skills:

→ Languages: Python, R, Java, C++, Dart and Kotlin
→ Exploratory Data Analysis and Data Visualization
→ Machine Learning, Deep Learning, Computer Vision, NLP (English and Arabic Text), GNN
→ Conversational AI Agents and LLM Training and Building Applications
→ Image and Video Processing
→ Database Design and Manipulation tools (SQL – MYSQL – MongoDB)
→ Big Data (Apache Hadoop)
→ Version Control Systems (Git)
→ ML Frameworks (Tensorflow – Tensorboard – Pytorch – Scikit-learn – Keras)
→ Cloud Computing (Microsoft Azure)
→ Writing Research Papers (Latex)
→ Others (Flutter – Android)

Projects:

Wuzzuf Job Recommendation System (Master's Graduation Project | NOV 2024
→ Dataset: Real Jobs, Applications, and Talents Dataset from Wuzzuf Company
→ Target: Develop a collaborative filtering-based system to recommend jobs to users based on their preferences
→ Activities: Preprocessed and analyzed Wuzzuf job dataset, designed and implemented a recommendation algorithm using collaborative filtering techniques, evaluating system performance with precision and recall metrics, and created a user-friendly interface for personalized job suggestions.

Non-Small Cell Lung Cancer Prediction
→ Objective: Classify Airbnb listings into different price categories using both text and image data
→ Tools & Technologies: Python, TensorFlow, VGG19, LSTM, GRU.
→ Activities: Integrated text and image data, performed data preprocessing, designed and tested deep learning models, and achieved an accuracy of 0.68 in classification.

Airline Passengers' Satisfaction
→ Goal: Predict and improve airline passenger satisfaction.
→ Activities: Prepared and analyzed passenger satisfaction data, developed machine learning models such as Random Forest and Support Vector Machine (SVM) to predict satisfaction levels, deploy these models, and create dashboards for visualization and monitoring.

Credit Card Approval
→ Goal: Develop a machine learning model to automate credit card approval decisions
→ Activities: Spearheaded the preprocessing and cleaning of anonymized applicant data (income, employment status, credit history) using Python. Developed and integrated risk score features (income, employment, age) through dataset merging and variable engineering. Designed and trained a binary classification model to automate approval decisions, optimizing accuracy and operational workflows.
→ Result: Increased approval accuracy by 15-20% with XGBoost (highest AUC) and CatBoost, reducing manual reviews and enabling scalable, data-driven decisions.

Certification:

→ Certified from Epsilon As a professional Data Scientest| July 2024
→ Certified from Udacity in Advanced Data Analysis Nano Degree| May 2024.
→ Certified in Completing Data Analysis Track from Udacity| October 2023.
→ Certified from NTL as an Android Developer| Mar 2019.