Lamia Merhy

Lebanon, Beirut | +961 70436568 | merhylamia@gmail.com | linkedin.com/in/lamia-merhy

Summary

I am currently a 4th year bioinformatics student with a minor in Data Analytics looking for internships or entry level jobs to expand my knowledge, skills, and experience in data science and/or computational biology.

Education

Bachelors of Science in Bioinformatics

Minor in Data Analytics | Lebanese American University | Beirut | 2024

Experience

Medical Education Data Engineer Intern

LAU Clinical Administration July 2023 – Present, Beirut

- Insuring the integrity of database pipelines through quality administration, maintenance, and security.

- Designing and implementing data management systems to ensure efficient storage and retrieval of medical education data.

- Participating in the design and development of data systems, applications, or tools specific to medical education needs.

Skills

- Python (Advanced)
- R (Advanced)
- Java (Advanced)
- SQL (Intermediate)
- Draw.io (Intermediate)
- PowerBi (Beginner)
- Tableau (Beginner)
- Autodock
- Bash
- Regex
- Microsoft Office (Excel, Word, PowerPoint)

Projects

1. **Related Projects:**

   a) Heart Disease Detection (Machine Learning):

   - Developed a machine learning model to detect heart disease using Python and libraries like NumPy, pandas, scikit-learn, and Matplotlib.

   - Implemented Logistic regression and K-NN algorithms to achieve accurate predictions.

   - Conducted data preprocessing, feature selection, and model evaluation for optimal results.

   b) Customer Service Prediction (Machine Learning):

- Leveraged Decision trees and Python libraries including NumPy, pandas, SciPy, and Matplotlib to predict customer preferences for a new service at a bank.

- Analyzed customer data, performed feature engineering, and achieved successful predictions.

- Collaborated with stakeholders to interpret and communicate the results effectively.

c) Genetic Sequence Analysis (Python):

- Utilized Python to analyze genetic sequences and identify the type of protein they encode.

- Applied data manipulation techniques, statistical analysis, and machine learning concepts to accurately classify protein types.

- Demonstrated strong problem-solving skills and attention to detail in delivering accurate results.

d) Customer Order Scripting (Bash):

- Developed a Bash script utilizing a select loop to efficiently handle customer orders.

- Employed multiple features, such as "grep", to utilize regex and check for any error on inserting orders and compare with the given menu

- Demonstrated proficiency in Bash scripting and the ability to solve real-world problems.

e) "Esophageal Cancer Analysis":

- implemented R programming to analyze an esophageal cancer dataset showing data relating to the patients of this cancer type.
- explored reasons and risk factors concerning esophageal cancer and came out with significance with respect to this disease.

f) Diabetes and its Correlation with Genetic and Environmental Factors:

- implemented R programming & used a very large dataset of around 2000 observations, consisting of abundant data related to the population under study.
- simulated models in order to draw significance of the dataset being employed

g) Easy Book:

- Developed a high-fidelity prototype of two applications both targeted at Lebanese university students one that organizes their sports routine and another that allows for the exchange of books for free among the students through LDA and Sentiment analyses of datasets.

h) Auto-docking 1HXB Complex:

- Analyzed and correctly predicted the structure of an HIV/AIDs protease with a drug inhibitor Saquinavir using Autodock and Chimera.

Involvements

1. **Trainer in the Training & Development Team**
   GC LAU Model United Nations, October 2021 - May 2022, Beirut

- Trained high school students and equipped them with the necessary knowledge about problem-solving skills and leadership enhancement.

- Responsible for boosting their public speaking potential, and teaching the formal procedures of the UN.

- Informed them about the current issues faced worldwide, guiding them towards the routes of solving issues and dilemmas diplomatically, building the basics of strategic planning in students' mentalities.

2. **Tutor in Biology**
   MMKN, September 2020 – January 2021 AND June 2023, Beirut

- Responsible for tutoring eighth graders Biology amid the COVID-19 Pandemic

- Responsible for tutoring ninth graders (Brevet students) Biology during the socio-economic crisis.

3. **Scouts Leader**
   Anwar, January 2019 - May 2023, Beirut

- Lead age-appropriate activities for diverse grade levels

- Was responsible for recruitment and training volunteers

- Organized activities that address current issues including girl interests and needs