Din Mohammad Dohan

Dhaka – Bangladesh

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 din813 • Kaggle

Education

American International University-Bangladesh	**Dhaka, Bangladesh**
Bachelor of Science in Computer Science and Engineering	*May 2017 – November 2021*

CGPA: ***3.63 / 4.00***

Bachelor's Thesis: *"Analyzing the Effect of COVID-19 on Mental Health based on Bangladeshi University Students "*
Presentation Slide
Supervisor: Md Masum Billah, Assistant Professor, American International University-Bangladesh

Publications

[1] Md Masum Billah, **Din Mohammad Dohan**, Afsara Tasnim, Shaily Sarker, and Brishty Talukder
Analyzing the Effect of COVID-19 on Mental Health based on Bangladeshi University Students.
In Proceedings of the 2nd International Conference on Computing Advancements, ICCA 2022, New York, NY, USA, 2022. Association for Computing Machinery. Available here

Objective: Prime goal of this thesis is to explore the impact of the covid19 pandemic on mental health among a representative sample of Bangladeshi university students and predict scale by training machine learning model.
Solution: Using All Classifier Model and finding suitable model.
Accuracy = 70.31% (Random Forest Model, Covid Scale) 67.19% (XGBoost Model, Anxiety Scale) 69.53% (XGBRF Model, Depression Scale)
Result: Results indicate age, COVID affected family members, fear of loved ones getting infected, online class difficulties, lack of proper education and academic pressure as key variables to trigger the psychological imbalance. Random forest, XGBoost and XGBRF have been proven to be the algorithms that performed comparatively better in the proposed model and lastly, the final results suggested an alarming state of Bangladeshi University students' psychological states.

Work Experience

Teaching Assistant	**June 2021 - August 2021**
American International University - Bangladesh	*Dhaka, Bangladesh*

Role:
- o Help students to give basic idea about given problems and solutions, also fix bugs for Linux based Operating System (OS) course.
- o Performed regular data entry tasks on students' evaluation grades
- o Provided feedback and guidance to the students regarding their task submissions

Featured Projects

Flight Fare Prediction: Kaggle Notebook | *Pandas, NumPy, Seaborn, Matplotlib, MinMaxScaler, OneHotEncoding, Autoviz*

- o **Objective:** Prime goal of this project is exploratory data analysis and find out which model is suitable and predict flight fare based on airline, source, destination, departure and arrival time.
- o **Result:** Performing all regressor model CatBoost (r2 score: 0.8717) perform better than others model, specially compared to XGBoost, Decision Tree and Random Forest.

World University Ranking Data Analysis: Kaggle Notebook | *Pandas, Seaborn, Matplotlib, AutoViz*

- o Exploratory analysis and visualize top 5 world university in 2015 using pie chart also

- o Visualize world rank according to their influence and publications, quality of education and progress.

Data Analyst Portfolio Project: Github | *MySQL Workbench, Tableau*

- o Analyzing Covid death data with SQL and visualizing some important data using Tableau.

   Visit Here For Full Project List

Extracurricular Activities

Founder and Volunteer   **2020 – On going**

Manobotar Duare   *Bogura, Bangladesh*

With an emphasis on alleviating poverty, I established a charitable fund and non-profit organization. To work with me, I formed a volunteer team here.

   Role:
- o Organize program
- o Generate content reports, postal card, banner
- o Prepare meeting schedule

Additional Achievements

Projects: Team Leader (Java Project, C# Project)

Bachelor's Thesis: Team Leader

Competitions:
- o Position 355th of 7573 team (Ranking Top 5%), *Kaggle Competitions 30 Days of ML*

Technical Skills

Programming Languages: C | C++ | C# | Java | Python | JavaScript
Scripting Languages: P H P | HTML5 – CSS3 (Bootstrap, Tailwind)
Database: My SQL Workbench| Microsoft SQL Server Management | phpMyAdmin | Oracle
Data Science: Pandas | NumPy | Scikit-learn | Matplotlib | PyTorch | Tensorflow | Seaborn
Machine Learning Algorithms: Linear/Logistic Regression (Supervised)
Data Mining Tools: Weka | Rapid Miner |Tableau | Power BI | Microsoft Excel
Other Software Tools: Code blocks | Visual Studio | VS Code | PyCharm | Gitbash | Overleaf
Additional Skills: Web-scraping | LaTex

Certifications

365 Data Science
- Data Analyst Career Track | *View Credential*
  - *Basics of Data Science*
  - *Data Analysis and Complete Data Visualization with Python, R, Tableau, Power BI and Excel*
  - *Data Cleaning and Preprocessing with NumPy and Pandas*

Coursera
- The Data Scientist's Toolbox | *View Credential*

Kaggle
- Python | *View Credential*
- Intro to Machine Learning | *View Credential*
- Intermediate Machine Learning | *View Credential*

Jovian
- Data Analysis with Python: Zero to Pandas | *View Credential*
  - *Analyzing Tabular Data with Pandas | Visualization with Matplotlib and Seaborn*
  - *Data Analysis and Complete Data Visualization with Python, R, Tableau, Power BI and Excel*
  - *Data Cleaning and Preprocessing with NumPy and Pandas*

- Machine Learning with Python: Zero to GBMs | *View Credential*
  - *Train a linear regression model using sklearn, model prediction*
  - *Train decision tree and random forest, tune hyperparameters and regularize*
  - *Training, compare & tune multiple models*

References

Md Masum Billah

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