

Aaphsaarah Rahman

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LinkedIn: <https://www.linkedin.com/in/aaphsaarah-rahman/> | GitHub: <https://github.com/Aaphsaarah> | Website: <https://aaphsaarah.github.io/>

EDUCATION:

M.S. in Biostatistics and Data Science | Cornell University | Weill Cornell Medicine | NY, USA | CGPA: 3.41/4.00 **Sept 2019 – Aug 2020**
B.S. in Electrical and Electronic Engineering | North South University | Dhaka, Bangladesh | CGPA: 3.43/4.00 **Jan 2013 – Apr 2017**
High School | Scholastica | Dhaka, Bangladesh | Under Cambridge (CIE) Board **Aug 1996 – Jul 2012**

TECHNICAL AND SOFT SKILLS:

- **Programming Language** – Python, R, SQL, VBA code, C++, Pandas, NumPy, Html
- **Data Analysis Tools** – RStudio, R Shiny, Access, MySQL Databricks, MATLAB, MS Excel, Word, PowerPoint, Jupiter Notebook, Visual Studio Code software
- **Domain Knowledge** – Biostatistics, Pharmaceutical studies, Causal Inference, Genetics, and Genomics, Biomedical Imaging
- **Expertise Area** – Statistical Modelling, Machine Learning, Unsupervised Learning, Natural Language Processing (NLP), Big Data, Data Mining, Data Cleaning, Data Analysis, Data Visualization, Data Management

RESEARCH PROJECTS: ([link inside](#))

- **Heart Disease Prediction** **May 2020**
Wrote a blog in R on how to build a classifier to predict whether a person has cardiovascular disease based on their medical test, age, and gender; To identify which test is more reliable in determining cardiovascular disease.
- **Immunization Database** **May 2020**
Built a database for children in NYC containing immunization information. It collects basic family information and information at the time of birth and proceeding immunization records. It would generate a vaccination report - tabulate all the child's vaccination records with their information and individual child's full record. Used SQL and ACCESS to make the database, forms, and reports.
- **AI Hackathon Competition** **Feb 2020**
Build a Health App to have all the medical records in one place. It seamlessly connects patients' medical records with their caregivers with consent. Used R and Html in Visual Studio Code software. Our team became the finalist in Healthcare AI Hackathon, 2020.
- **Breast Cosmetic Outcomes of breast-conserving surgery(BCS) for multiple ipsilateral breast cancer (MIBC) Patients** **Dec 2019**
Performed various hypothesis tests and data visualizations to observe the trend in patients assessed cosmesis scores over the follow-up time, the similarity between patients' and doctors' views in the surgery, a trend in the patients' satisfaction, physical well-being, and radiation effect throughout follow up.
- **IMDB and TMBD Pattern Analysis** **Dec 2019**
Performed an Unsupervised Principal Component Analysis, PCA with the IMDB data set, in Python to find a relationship with the features(which includes IMDB rating, cast, Facebook popularity among the cast, genre, box office collection, etc.) which could relate to the success of the movies.
- **Happy Valley Meat website** **Oct 2019**
Built a website using the Shiny app [R] to showcase some environmental insights on the beef industry. The website was dynamic, simple, and had good visualization so that any non-technical audience can understand the interpretation. It was much appreciated by the client for its simplicity.

PROFESSIONAL EXPERIENCE:

Science Teacher **Nov 2018 – Aug 2019**
Sir John Wilson School | Dhaka, Bangladesh
Supervised 120+ students in educating and guiding them in Science and life lessons. Created a curriculum for classes 6 and 7 for the whole year. Analyzed their previous curriculum, and scores in excel. Tracked down the students' common problems in specific topics using R and SQL from Excel. Developed a better and easy curriculum and materials for the students. Handled parent-teacher meeting dynamically and spontaneously.

Math Coordinator **Jan 2018 – Aug 2018**
Bangladesh Digital Education Research Limited, United Group | Dhaka, Bangladesh
Resided as a content writer and curriculum developer. Created creative online study materials for high school students on various topics from scratch. Developed the materials in such a way that it was easy and interesting for students to engage in them dynamically and understand the topic completely. Performed R&D on various queries using SQL in their student and teacher database.

Business and Research Analyst Intern **Oct 2017 – Jan 2018**
Grameenphone Ltd | Dhaka, Bangladesh
Performed in-depth secondary research in ISP Industry and formulated a report upon it under the Business Intelligence department with the team. Collected data (features) from the popular apps in Excel regarding what information they collect from customers and performed comparative analysis on the local and international app. And made a visual presentation on it. Performed a case study of the video entertainment app industry (YouTube, Ifflix, Bioscope, etc) compared each app on different features and made a business model on how to improve Bioscope further from the rest.

PUBLICATION/ CONFERENCE: ([link inside](#))

S. Sultana, A. Rahman, F. H. Chowdhury, and H. U. Zaman, "A novel Braille pad with dual text-to-Braille and Braille-to-text capabilities with an integrated LCD display," 2017 International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICT), Kannur, India, 2017. Publisher : IEEE Xplore

ACHIEVEMENTS:

Mentor in Higher Study Abroad- Global Hub of Bangladeshis, **2019-present** | Finalist on AL Hackathon Competition, **2020** | Best Paper Award on IEEE Publication, **2017** | INSB Member (IEEE North South University Student Branch) **2016-17** | Finalist of YLP, Youth Leadership Prize, BYLC, **2016** | Art and Practice of Leadership Certificate(APL-8 graduate) from BYLC, Bangladesh Youth Leadership Centre **2015** | Attained Bronze and Silver Standard of the International Award for Young People, Duke of Edinburgh, in **2011, 2013** respectively.