# ASHIQUR RAHMAN RONY

♥ Mirpur 1, Dhaka, Bangladesh

□(+88) 01772215084 ⊠ashiqurrahman.stat@gmail.com □linkedin.com/in/ashiqur-rahman-rony ⊕github.com/ashikpydev

#### Education

University of Dhaka (Institute: Govt. Titumir College, Dhaka)

January 2019 - December 2023

Bachelor of Science in Statistics

Results published March 2024

• CGPA: 3.55/4.00 (2nd year: 3.77, 3rd year: 3.68, 4th year: 3.71)

Graduated 3rd in the class

# **Professional Experience**

#### Development Research Initiative (dRi)

Iune 2024 - Present

Ir. Officer, Data Analytics

- Developed 100+ digital survey forms in SurveyCTO and KoboToolbox for research projects led by institutions including the World Bank, Oxford, LSE, Purdue, UPenn, BRAC, etc., and provided feedback on question design and structure based on study objectives and field implementation
- Processed and cleaned 20+ large-scale datasets using Stata, including one with over 35,000 variables from 5,000+ household surveys, contributing to the development of a national health surveillance system in Bangladesh
- Programmed high frequency checks to monitor data quality using Stata which fed into a dashboard in Excel
- Developed training materials for Randomized Controlled Trials (RCTs), as well as cross-sectional and panel surveys
- Developed 30+ live dashboards in Google Sheets and Power BI, integrated with SurveyCTO API for real-time data monitoring.
- Produced study area maps using QGIS to support field planning and spatial insights
- Conducted advanced statistical analyses using Stata and R to meet client-specific research goals and deliverables

#### BRAC James P Grant School of Public Health, BRAC University

March 2024 - May 2024

Intern (Statistician)

- Assisted the senior statistician in drafting the final evaluation report for the ARISE (Accountability and Responsiveness in Informal Settlements for Equity) project
- Performed statistical analysis on BDHS and MICS datasets to compare findings with national-level indicators
- Conducted literature reviews to strengthen recommendations for improving WASH (Water, Sanitation, and Hygiene) facilities
- Monitored field research assistants, collected GIS data using SW Maps, and transcribed qualitative data from FGDs, KIIs, and IDIs

Upwork September 2023 – March 2024

Freelance Research Analyst, Top rated

- Taught R programming, JMP, quantitative analysis, and business statistics to undergraduate and graduate students
- Guided research projects involving linear and logistic regression, time series forecasting (ARIMA), and econometric models (Difference-in-Differences, panel data)
- Explained how to evaluate models using R<sup>2</sup>, RMSE, MAE, and AIC/BIC, and supported thesis writing by clarifying methods and results

## **Teaching Experience**

### Adjunct Faculty - Department of Statistics, Government Titumir College

July 2024 - December 2024

- Designed and graded class tests contributing 30% of final grades, providing constructive feedback to improve statistical understanding
- Taught Introduction to Statistics and supervised R and SPSS labs, covering data manipulation, statistical tests, regression, visualization, and reproducible reporting with R Markdown

## Private Tutor - Dhaka, Bangladesh

January 2023 - December 2023

- Tutored 200+ undergraduates in statistics and mathematics through coaching centers and private lessons
- Provided additional home tutoring in Mathematics and Statistics, tailoring lessons to individual learning needs
- Created educational content through the YouTube channel <u>StatQuery</u>, teaching statistical concepts, data analysis techniques, and software tools

# Research Experience

**Undergraduate Project:** Assessing the Influence of Internet Usage on Academic Performance and Mental Health of Undergraduate Students (Supervisor: Md. Galib Hossain, Assistant Professor, Govt. Titumir College, Dhaka)

#### Responsibilities:

- Drafted the full research proposal outlining objectives, methodology, and timeline
- Designed survey questionnaire by discussing with team members and the supervisor
- Processed and cleaned the data using Stata and performed statistical analyses including univariate, bivariate, and multivariate tests using R programming
- Contributed to writing the methodology and results sections of the final report

**Ongoing Research:** A Decade of Change? Trends in Mental Health Proxies and Their Correlates in Bangladesh Using BDHS Data (2014–2022) (*Manuscript in preparation*)

**Responsibilities:** Extracted and merged BDHS 2014–2022 datasets, cleaned data, and performed statistical analyses (Chi-square, logistic regression) using Stata

## **Technical Strengths**

Survey Programming Kobo Toolbox SurveyCTO

Statistical Analysis R Python JMP Stata IBM SPSS

Visualization: Power BI QGIS

## **Software & Tools Development**

- Developed an <u>web application using Gemini 2.5 pro and python flask</u> for transcribing Bangla audio to generate English report for Qualitative interviews (kii, idi, fgd)
- Developed <u>custom STATA packages</u> to automate survey data cleaning and basic analysis increased efficiency by 25% and improved reproducibility across projects.
- Contributed to the development of dRi's Enumerator Performance Monitoring System, applying statistical methods to identify outliers in enumerator performance (using mean, IQR, and Gaussian-based thresholds), adopted by project managers to reduce survey errors by 10%

## **Relevant Coursework**

Mathematical Courses: Linear Algebra, Calculus I & II, Ordinary Differential Equation, Mathematical Methods

**Statistical Courses:** Introduction to Statistics, Probability and Probability Distribution, Theory of Estimation, Sampling Distribution and Order Statistics, Elementary Sample Survey, Economic Statistics and Index Number, Test of Hypothesis, Sampling Techniques, Regression Analysis, Epidemiology, Industrial Statistics and Operations Research, Demography, Simulation, Multivariate Analysis, Time Series Analysis, Design and Analysis of Experiment, Econometrics, Biostatistics, Stochastic Process, Research Methodology

# Extra-curricular activities, awards and achievements

- 1st Place, Research Proposal Writing Contest Govt. Titumir College Research Club (2023) Awarded for developing an innovative research proposal, demonstrating strong skills in study design, problem formulation, and academic writing
- Founder President, Govt. Titumir College Analytics Club (Jan 2023) Established and led a student-driven platform that now connects 2,000+ members, promoting collaborative learning in data analysis and statistical methodologies
- Co-Instructor, IBM SPSS Workshop Govt. Titumir College Research Club (Feb 2023) Designed and delivered hands-on training
  on IBM SPSS for undergraduate students from diverse disciplines, strengthening their quantitative research skills

## **Certifications**

- PH125.3x: Data Science: Probability HarvardX, edx
- <u>Introduction to Calculus</u> The University of Sydney, Coursera
- <u>Statistical Inference</u> Johns Hopkins University, Coursera
- Data Analysis with R IBM, Coursera
- <u>Programming for Everybody (Getting Started with Python)</u> University of Michigan, Coursera