# SILVIA KHANAM

**Assistant Professor | Department of Statistics and Data Science**

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## PROFILE

Assistant Professor in the Department of Statistics at Islamic University, Kushtia, Bangladesh, with academic training in Applied Statistics and experience in university teaching and statistical research. Research interests include generalized linear models, statistical modelling, and applied data analysis.

## ACADEMIC APPOINTMENTS

**Assistant Professor**
Department of Statistics, Islamic University, Kushtia, Bangladesh | Effective 29 October 2025

**Lecturer**
Department of Statistics, Islamic University, Kushtia, Bangladesh | 29 October 2022 – 28 October 2025

**Research Associate**
Institute of Statistical Research and Training (ISRT), University of Dhaka, Bangladesh | 1 February 2022 – 31 May 2022

## EDUCATION

**M.S. in Applied Statistics**
Institute of Statistical Research and Training (ISRT), University of Dhaka, Bangladesh | Session: 2019–2020 | CGPA: 3.93/4.00

**B.S. in Applied Statistics**
Institute of Statistical Research and Training (ISRT), University of Dhaka, Bangladesh | Session: 2015–2016 | CGPA: 3.89/4.00

## RESEARCH INTERESTS

- Generalized linear models (GLMs); bias reduction and modified-score methods; statistical theory; statistical modelling; multivariate analysis; sampling and survey statistics; applied data analysis.

## THESIS

**Master's thesis**
"On the Second-Order Bias Reduction in the Generalized Linear Models." Completed under the National Science and Technology (NST) Fellowship. Programming language: R.

## RESEARCH PROJECTS

**Regional variations in non-communicable diseases in Bangladesh**
"Exploring regional variations in prevalence, pattern, and health-seeking behavior of patients with non-communicable diseases in Bangladesh: A Bayesian spatial analysis of national survey data." Research Associate under the Centennial Research Grant (CRG), ISRT, University of Dhaka. Software: Stata.

**Ride-hailing and travel demand**
"Impact of Ride-Hailing Services on Travel Demand in Dhaka City." Project conducted under the supervision of a professor in the Department of Statistics, University of Dhaka. Software: R.

**Undergraduate research project**
"Determinants and Trends in Attitudes towards Wife-Beating in Bangladesh: Evidence from BDHS Data." Software: SPSS.

## TEACHING EXPERIENCE

Courses taught at the Department of Statistics, Islamic University:

- MATH-1103: Matrix Algebra and Its Statistical Applications
- ENG-1105: Communicative English for Scientific Writing
- MATH-1203: Linear Algebra
- STAT-1202: Sampling Techniques I
- STAT-2102: Sampling Distributions
- STAT-2203: Analysis of Variance
- MATH-2206: Numerical Methods

- STAT-3105: Stochastic Processes I
- STAT-3207: STATA and Simulation
- STAT-4102: Multivariate Analysis I
- STAT-4108: Data Analysis with SAS
- STAT-4202: Multivariate Analysis II
- STAT-4207: Environmental Statistics

## AWARDS AND HONOURS

- National Science and Technology Fellowship, 2020 — Ministry of Science and Technology, Government of Bangladesh.
- Dean's Award, 2019 — Faculty of Science, University of Dhaka, for outstanding performance in the B.S. (Honours) in Applied Statistics.
- Moulovi Ahmed Ullah Memorial Trust Fund Scholarship, 2017 — for outstanding performance in the first year of the B.S. (Honours) in Applied Statistics.
- Dhaka University Undergraduate Scholarship, 2016 — University of Dhaka, for academic excellence.

## TECHNICAL SKILLS

- Statistical programming and analysis: R, Stata, SAS, SPSS, Python, MATLAB, C++.

## LANGUAGES

- Bengali;
- English: IELTS-7.5.