

# SAMIUL HOSSAIN SAJAL

## ABOUT ME

Aspiring data analyst with a strong foundation in physics, programming, and statistical methods. Experienced in handling real-world datasets, building dashboards, and developing business intelligence solutions.

## PROJECTS

### Three-Body Simulation in Julia

- Modeled Saturn, Janus & Epimetheus using the Runge-Kutta method
- Simulated orbital exchange to study collision avoidance

### The European Social Survey (ESS) data analysis

- Trends between the internet/news consumption and climate change opinion.
- Correlation between internet usage time and the user's age.

### Arctic ice maps

- Analyzed 20 years of satellite data on Arctic ice.
- Visualized long-term trends in ice concentration loss.

### Business Data Modeling and Analysis

- Data modeling for Transactions, Sales, Purchase, Inventory Stock, Expenses, Revenue
- Realtime Dashboard, Supplier and Dealer profiles.

## EDUCATION

**M.Sc. in Physics** – University of Cologne, Germany

(Oct,2023-Present)

**M.Sc. in Physics** – SUST, Bangladesh

(June,2019-Nov,2021)

**B.Sc. in Physics** – SUST, Bangladesh

(Mar,2015-Apr,2019)

## RESEARCH EXPERIENCE

**Graduate Thesis Work** – NLO Research Laboratory, SUST

(10.2019-11.2021)

- Utilized HPC-driven Molecular Dynamics (MD) simulations with ReaxFF to model Aluminum Nanoparticle (ANP) formation in Pulsed Laser Ablation (PLAL).
- Demonstrated the influence of temperature decrease rate on ANPs growth and structure.

## TECHNICAL TRAINING

**Intensive Week: Coding** – University of Cologne

(June,2025)

- Project-based Julia course on scientific programming and visualization.

**Python for Everybody** – University of Michigan | Coursera

(Feb,2025)

- Structured program: web scraping, databases, and APIs in Python.

**Google Data Analytics Professional** – Google | Coursera

(Sept,2022)

- Developed hands-on skills in data cleaning, analysis, visualization, and using SQL and R for real-world business insights.

**Scientific Programming with Python** – University of Cologne

(July,2023)

- Learned core Python techniques for modeling, simulation, visualization and scientific data handling.

**Every number tells a story** – ProfessionalCenters der Uni. Cologne

(May,2023)

- Developed skills in summarizing & interpreting survey data using statistical techniques in R.

## PROFESSIONAL EXPERIENCE

**Restaurent Employee** – Atawich

(Jan,2024-Present)

**Sortation Associate** – Amazon Deutschland Services GmbH

(June,2023-Sept,2023)

## AWARDS AND HONORS

National Science and Technology (NST) Fellowship 2020-21

(2021)

Honorable Photographer - "Exceed 2018-: SUST CEE Festival"

(2018)

2nd runerup - BNMPC Science Fair 2012

(2012)



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https://github.com/SAMIULSAJAL

## SKILLS

Python

R, Julia

Github, SQL, Latex

Linux OS, Mac OS

Statistical Data analysis

Photography

Adobe Lightroom

Adobe Premier Pro, PS

MS Excel, Google Sheets

MS Power BI, MS Word

## LANGUAGES

- Bangla (Native)
- English (Proficient User-C1)
- German (Beginner-A1)

## HOBBIES

- Photography
- Videography
- Badminton