

# Marium A. Tapal

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## TECHNOLOGICAL EXPERIENCE & PROJECTS

### DEPT. OF STATISTICAL AND DATA SCIENCES, Smith College

**Undergraduate Researcher**, Prof. Benjamin S. Baumer Jan'20 – Present

- Develop R package `fec16` which contains relational data from the 2016 United States federal elections in the form of pre-loaded datasets and functions. It is hosted on the **Comprehensive R Archive Network** (CRAN)
- Present an e-poster at the Women in Statistical and Data Sciences 2020 conference

**Data Science Intern**, Prof. Albert Y. Kim Summer 2020

- Major update to `fivethirtyeight` R package to host large datasets via an add-on data package using the `drat` functionality.
- Internal code improvements for better reproducibility of the online `ModernDive` textbook. Refresh associated website built via GitHub pages for better organization and aesthetics. Debug and fix issues in the supplementary R package

### SMITHIES IN STATISTICAL AND DATA SCIENCES

**Data Ambassador** Sep'19 – Present

- Design and conduct IRB approved survey to create an open-source database for Smith students. Use data science methods to deliver key findings
- Organize Smith's 2nd Data Science Day with a panel discussion and data-related activities including a data science themed 3-leveled word search

### UNITED BANK LIMITED, Karachi, Pakistan

**Treasury & Capital Markets Intern** Summer 2019

- Performed statistical analysis of the bank's financial statements using MS Excel and R
- Shadowed teams and analyzed products via simulations of real-world transactions
- Used the Bloomberg Terminal to monitor real-time market data and trading

## PERSONAL PROJECTS

- Baking Website using R Markdown, HTML and CSS
- Minesweeper game in Python for Spring 2019 Introduction to CS course final project

## LEADERSHIP EXPERIENCE

### SMITH COLLEGE RESIDENCE LIFE

**House Community Advisor** Aug'19 – Present

- Work as a liaison between house residents and the college's service departments
- Act as the initial contact person for all residents in the house, conduct social justice mediations, facilitate internal governance, enforce college policies, and organize educational programs in the house

### EKTA (SMITH'S SOUTH ASIAN STUDENT ORGANIZATION)

**Publicity Chair, Social Chair** Sep'18 – Present

- Organize weekly events relating to South Asian culture, cuisine, and practices
- Responsible for marketing events gathering 100+ people and coordinating catering

## OTHER EXPERIENCE

**Undergraduate Researcher**, Dept. of Math, Smith College Sep'19 – Dec'19

**Dining Hall Worker**, Smith College Sep'18 – May'19

**Senior Teaching Assistant**, Advanced Level Mathematics Sep'16 – Jun'18

**The Nixor Times**, Chief Executive Officer Sep'16 – Feb'18

## EDUCATION

### SMITH COLLEGE

Northampton, MA, USA

#### B.A. in

#### Statistical and Data Sciences & Mathematics

expected May 2022

Cum. GPA: 3.98/4.00

Major GPA: 4.00/4.00

### NIXOR COLLEGE

Karachi, Pakistan

#### Cambridge Advanced Level

Class of 2018

Grades: 4A\* & 1A

## TECHNICAL SKILLS

### Expert:

- R
- Git/GitHub

### Intermediate:

- Python
- HTML/CSS
- MATLAB

### Familiar:

- SQL

## COURSEWORK

Advanced Programming in R

Multiple Regression

Intro to Data Science

Statistics in Education

Intro to Computer Science

Linear Algebra

Intro to Statistics

Multivariable Calculus

Complex Analysis

## AWARDS

Dean's List 2019-2020

Dean's List 2018-2019

Dean's Wall 2017-2018

100% Merit Scholarship – A Level

Pursuit of Excellence in Academics

## TRAININGS &

## CERTIFICATIONS

Wall Street Prep Bootcamp

CITI – IRB Researchers

Social Justice Mediation