

# TAZBIA FATIMA

[tazbia.fatima@columbia.edu](mailto:tazbia.fatima@columbia.edu) | <https://www.linkedin.com/in/tazbia-fatima/>

## Education

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**Dual Master of Science in Journalism and Computer Science, Columbia University**, New York, NY Expected May 2023  
Graduate School of Journalism, The Fu Foundation School of Engineering and Applied Science

- **Journalism Courses:** *Computational Journalism; Audio and Video Production*; Produced [multiple stories for The Uptowner: Columbia News Service](#); two [podcast episodes](#) for Onomatopoeia, a podcast of Columbia Journalism School; four video stories for Video Journalism class.
- **Computer Science Courses:** *Natural Language Processing, Climate analysis, Large-scale Network Analysis, Advanced Database Systems, User Interface engineering and Data visualization.*
- **Awards:** Honors for Reporting; Geffen Scholarship, Columbia Journalism School

**Bachelor of Technology in Information Technology, Jawaharlal Nehru Technological University**, Hyderabad 2015-2019

- **Courses:** Java, C++ and Python Programming, Databases, Cloud Infrastructure, Front-end Technologies, Advanced English and Communication lab, Creative Writing, Magazine Production.
- **Awards:** summa cum laude

## Professional Experience

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**Computational Research Assistant, Tow Center for Digital Journalism**, New York, NY Mar 2022 – Jun 2022

- Implemented system design and code to extract the metadata of news articles on news aggregator websites with the aim of creating a network of people involved in these pink slime news organizations.
- Executed ethical scrapers and crawlers using Python, MySQL Databases and AWS cloud.

**Software Engineer, NCR Corporation**, Hyderabad, India May 2019 – Jun 2021

- Led infrastructure migration to Azure cloud as Subject Matter Expert(SME) for the Aloha Online Ordering product servicing leading food chains like Nando's and Buffalo Wild Wings across APAC region.
- Managed four interns in infrastructure scaling on-demand to meet ordering traffic during Super Bowl matches.
- Promoted to Team Lead for Containerization R&D and Software Deployments.

**Software Engineering Intern, Apple Inc.**, Hyderabad, India Dec 2018 – Apr 2019

- Implemented the project Weigh-To-Go, a calorie-tracking web application. Used JavaScript, React and NodeJS to build front-end features; Java programming for data collection; MySQL for database building and maintenance.
- Selected to be a part of All-India 30-intern only Apple Inc. cohort.

## Select Projects

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Ongoing Master's Project:

- A 6000-word investigative story on the migration of Indians to the US and their routes and trends. Reporting bolstered by data analysis of YouTube videos and adverts on the subject.
- Built a data acquisition and topic-clustering pipeline for the analysis in Python. Engineering it to make a reusable tool.

[Rise or Fall: Visualizing the popularity of Music Artists:](#)

- Built an Interactive Data Visualization that shows career trends of musicians by popularity on Spotify. Shows the lifetime of each song, to give users micro-level information.
- Engineered using JavaScript and d3.js Embedded with Spotify to play a popular track of each artist.

[Causal Analysis of climate indicators on extreme flooding in Pakistan](#) in 2022:

- Built Machine Learning algorithms on correlation analysis in Python, to identify the weather metrics used to predict future susceptibilities.
- Provides reporting leads to investigate the depletion of snowmelt and surface soil health of the region.

[Tackling Misinformation: Studying COVID-19 Narrative by Indian News Media:](#)

- Data Analysis to understand the stance of Covid-19 specific news articles by Indian Media with a hypothesis to identify the fear-mongering narrative by news outlets.
- Implemented Natural Language Processing pipeline in Python. Data collected using scraping and request framework via News APIs.

## Skills

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**Journalism:** Reporting, Investigative and OSINT Technologies, Audio-Video Production, Narrative Writing

**Programming Languages and Databases:** Python, HTML, JavaScript, SQL, Firebase Database, Neo4j, CSS, jQuery, D3

**Cloud Platforms:** Microsoft Azure Cloud, Google Cloud Platform, AWS, Kubernetes, Docker, Go-language

**Machine Learning:** Natural Language Processing, Computer Vision, Social Network Analysis

**Languages:** Urdu(Native), English(Proficient), Arabic(Elementary), Telugu(Elementary), Hindi(Elementary)