MEDHA BULUMULLA

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Objective

To utilize my analytical and computational skills to develop data-driven solutions.

Education

Master of Professional Studies, Information Sciences Jan 2023 - Dec 2023
Cornell University, College of Computing and Information Sciences

Bachelor of Science, Information Sciences, Data Science Aug 2020 - May 2023
Cornell University, College of Computing and Information Sciences

Honors: Cum Laude, Distinction in Research

Academic Projects

- Interviewed/tested users, designed and developed a prototype of PhD Student Visit App using JavaScript, Vue, Bootstrap, HTML, and CSS in a four person team collaborating on Github.
- Created interactive visualizations using D3.js in three-person teams collaborating on Github: Plant Your Own Produce, Pittsburgh Restaurants, Sentiment Analysis of Tweets, Sleep Cycles, and Olympic Medal Map

Work Experience

Application Development Intern June 2023 - Aug 2023
Dormitory Authority of the State of New York

- Utilize Restful API calls in C# and SQL stored procedures to extract, transform and load (ETL) data into SQL databases relying on Microsoft SQL Server Integration Services (SSIS) and SQL Server Management Studio (SSMS).
- Dataset creation though web scraping of DASNY related media to develop a report on sentiment analysis on construction projects.

Research Assistant Jan 2021 - present
Cornell University, Dyson School of Business

- Data cleaning, probabilistic matching, and distance calculations of two large datasets (80,000+ and 30,000 entries) from the from Office of Temporary and Disability Assistance (OTDA) and Food Bank of the Southern Tier (FBST) about public and private food assistance.
- Wrote a senior honors thesis titled "Understanding Spatial Patterns of Households' Use of Food Pantries" that relied on a mixed methods study of Institutional Research Board (IRB) approved surveys and logistic regression of administrative data about New York State food assistance using Python and R.
- Developed a Python user guide, website, and educational modules with International Food Policy Research Institute (IFPRI) to teach predicting malnutrition and poverty in the Global South utilizing Multivariate Random Forest Method funded by United States Agency for International Development (USAID).
- Utilized dataset collection and machine learning techniques to create a regular flagship publication, Agri-food Systems Technologies and Innovations Outlook (ATIO), at the Office of the Chief Scientist at Food and Agricultural Organization (FAO).

Teaching Assistant, Design & Programming for the Web Aug 2021 - Dec 2022
Cornell University, Ann S. Bowers College of Computing and Information Science

- Instruct students in SQL, PHP, HTML, CSS, and back-end/front-end web design.
- Co-lead a discussion for the intermediate and introductory course for 15-25 students, hold office hours, and grade assignments every week.

Skills

- **Computer Languages:** SQL, C#, Java, Python (NumPy, Pandas, Matplotlib, BeautifulSoup, Python Record Linkage Toolkit, GeoPy, Selenium), R, LaTeX, PHP, Javascript (D3.js, Vue.js), CSS, HTML.
- **Miscellaneous:** Excel, Tableau, GitHub, Jupyter Notebook, ArcGIS, Visual Studio (Code), SQL Server Management Studio, Docker.