# MEDHA BULUMULLA

mb2569@cornell.edu • +1 5186986007 • Website • LinkedIn

## Objective

To utilize my analytical, computational and web design skills to find innovative solutions

## Education

**Cornell University**

Bachelor of Science, Information Science, Data Science Concentration — Aug 2020 - May 2023
Major GPA: 3.8; Cumulative GPA: 3.6

Master of Professional Studies, Information Science, Data Science Concentration — Jan 2023 - Dec 2023

## Relevant Courses

- Data Mining & Machine Learning, Introduction to Data Science, Probability Models and Inference, Biological Statistics I-II, Calculus I-III, Linear Algebra, Design & Programming for the Web, Human-Computer Interaction, Data-Driven Web Applications, Object-Oriented Programming & Data Structures, Introduction to Computer Science, Networks.
- **Spring 2023:** App Design & Prototyping, Product Management, Computational Sustainability, Interactive Data Visualizations.

## Academic Projects

- Honors Research Undergraduate Thesis on determining food pantry characteristics that users seek using data cleaning, merging, calculating travel distances of an administrative dataset and surveys.
- Created an interactive world map on Olympic Medals and a static visualization on Chocolate Consumption using D3.js in a three-person team collaborating on GitHub.
- Designed and implemented a store website for my small business using PHP, SQL, CSS, and HTML deployed on Heroku.

## Skills

- **Languages:** Python *(NumPy, pandas, Matplotlib, BeautifulSoup, Python Record Linkage Toolkit, GeoPy)*, R, PHP, SQL, Javascript (D3.js), CSS, LaTeX, HTML, Java.
- **Miscellaneous:** Excel, Tableau, GitHub, Jupyter Notebook, ArcGIS

## Work Experience

**Research Assistant** — Jan 2021 ∼
Cornell University, Dyson School of Business

- Data cleaning, analysis, merging, and calculating travel distances in Python and ArcGIS in a secure environment on two large datasets (80,000+ and 30,000 entries) to understand how households utilize public and private food assistance.
- Developed a Python user guide, website, and educational modules to teach predicting malnutrition and poverty in the Global South utilizing Multivariate Random Forest Method.
- Utilized dataset collection and machine learning techniques to develop and write a regular flagship publication in a team of 30 researchers from various institutions.

**Webmaster** — Jan 2021 ∼
Cornell University, College of Agriculture and Life Sciences

- Redesign and add relevant content using HTML, CSS, JavaScript, and Bootstrap for three research groups.

**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 section for 15-25 students, hold office hours, and grade assignments every week.

**Research Intern** — June 2022 - Aug 2022
Southern African Institute for Policy and Research, Zambia

- Research and proposal writing about Small, Micro and Medium Enterprises in Zambia.
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