MEDHA BULUMULLA

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Education

Master of Professional Studies, Information Sciences (Informatics) Jan 2023-Dec 2023
Cornell University, College of Computing and Information Sciences GPA: 3.98

Bachelor of Science, Information Sciences/Data Science concentration (Informatics) Aug 2020-May 2023
Cornell University, College of Computing and Information Sciences GPA: 3.65
    Honors: Cum Laude, Distinction in Research

Skills

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

Work Experience

Application Developer Intern May 2023-Aug 2023
Dormitory Authority of the State of New York

- Write Restful API calls in *C#* using *.NET Framework* and *SQL stored procedures* to extract, transform and load (ETL) data into databases relying on Microsoft SQL Server Integration Services (SSIS) and SQL Server Management Studio (SSMS) to create financial reports.
- Webscraping using *Selenium in Python* to create a sentiment analysis report on the organization's projects.

Research Assistant Jan 2021-Dec 2023
Cornell University, Dyson School of Business

- *Data cleaning, analysis (logistic regression), merging, and calculating travel distances in Python and ArcGIS* in a secure environment on two large datasets (80,000+ and 30,000 entries) from the Office of Temporary and Disability Assistance (OTDA) and Food Bank of the Southern Tier (FBST) to improve client experience.
- 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).
- Developed a Python user guide, website, and educational modules with International Food Policy Research Institute (IFPRI) to teach predicting malnutrition and poverty utilizing the machine learning technique, Multivariate Random Forest Method funded by United States Agency for International Development (USAID).

Webmaster Jan 2021-Dec 2023
Cornell University, College of Agriculture and Life Sciences

- Manage and redesign 3 research group websites using *HTML, CSS, JavaScript and Bootstrap*.
- Interviewing, hiring, and training new replacement webmaster.

Teaching Assistant, Design & Programming for the Web Aug 2021 - Dec 2023
Cornell University, Ann S. Bowers College of Computing and Information Science

- Instruct 15-25 students in SQL, PHP, HTML, CSS, debugging, and back-end/front-end web design.
- Supervised undergraduate teaching assistants and graded weekly assignments.

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.
- Creation of website accessibility and effectiveness report to appeal to international stakeholders.

Academic Projects

Microsoft Full-Stack Course Registration Web App: As a back-end developer within a team of Microsoft back-end developers, front-end specialists, and UX researchers, I architected a full-stack class registration system, utilizing Microsoft Azure, Docker, and Angular.js.

Jewelry Market Research: Scraped Amazon and Google Analytic data to develop a market analysis report to help small businesses competing on Amazon in my Product Management course using Python and Excel

Data Management for Technology Center: Developed dimensional data model via Wherecape, data dictionary, ETL source-to-target and produced analysis and Tableau visualizations of financial performance and customer scheduling cancellations for the University's Biotechnology Technology Resource Center.

D3 Interactive Visualizations: 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](#)

Leadership and Volunteer Activities

Cornell Data Journal Managerial Editor and Treasurer: Organized external events by communicating and reaching out to speakers, determined the standard project team's process with the Executive Board, wrote budget reports and conducted [JavaScript Workshops](#).

Statistics and Data Science Representative Cornell Computing Information Sciences (CIS) Diversity and Inclusion Council: Met with CIS Diversity Council to suggest new ideas to promote diversity and inclusivity, assisted in interview process for hiring Diversity and Inclusion Director.

Sexual Health Educator: Educated peers on scientifically accurate, inclusive, and safe sexual practices with McKinley Health Center through visualizations and facilitation of 10 events/sessions about healthy relationships and risk reaching over 1000 students in Fall 2019.