Medha Bulumulla

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EDUCATION

Cornell University   2020 – 2023
Bachelor of Science in Information Science (cum laude, distinction in research)   *GPA: 3.65*
                                                                                                                                    2023
Master of Professional Studies in Information Science   *GPA: 3.98*

COURSEWORK

Courses: Interactive Data Visualizations, App Design & Prototyping, Data-Driven Web Applications, Project Management, Product Management, Business Intelligence Systems, Data Driven Marketing, Data Mining and Machine Learning, Human Computer Interaction, Design & Programming for the Web, Object Oriented Programming & Data Structures, Networks

EXPERIENCE

NYS Office of Information Technology Systems | *Systems Analyst*   June 2024 – Present
Working on the Unemployment Insurance Modernization Project, an initiative tasked with replacing a legacy mainframe system to process unemployment claims. I manage testing to ensure consistency between 15 contractors and 20 developers by creating design documents, Selenium test cases, identifying system and data discrepancies via SQL, and creating sample data using SOAP. I also analyze application performance and defects with SQL and Excel.

NYS Department of Health | *Program Manager*   March 2024 – June 2024
I managed 8 family planning clinic contracts to ensure they are adhering to Federal and State regulations. This involved reviewing reports & budgets, and providing resources based on performance metrics.

Dormitory Authority of the State of New York | *Application Developer Intern*   May 2023 – August 2023
I worked on managing state bonds using C# to update ETL processes. I also generated financial reports using Microsoft SQL Server. As a passion project, I conducted sentiment analysis in Python on organizational projects to quantitatively analyze opinions on DASNY.

Cornell University | *Research Assistant, Teaching Assistant & Webmaster*   January 2021 – December 2023
I conducted research on food inequality by analyzing and predicting travel distance to food pantries based on datasets from New York State. This involved data cleaning and machine learning in Python and was published in FAO, a top agency on food security research. I managed our research group's website using JavaScript and Bootstrap.

I was also the head teaching assistant for an intermediate web programming class, where I managed 25 undergraduate teaching assistants.

PROJECTS

Microsoft Course Registration App | *SQL, JavaScript (Angular.js), Docker, Microsoft Azure*
- I collaborated with the Azure SQL Product team from Microsoft for my graduate project to develop a full-stack class registration system using Azure. I worked as a developer and used Angular.js, Docker and SQL to architect the system. Our work was published on Microsoft's Official Developer Blog.

D3 Visualizations | *JavaScript (D3.js), Python, HTML, CSS*
- Plant and Cooking Guide: An interactive network graph and charts to identify ideal crops to grow based on cooking habits and recipes based on the user's garden.
- Map of Pittsburgh Restaurants: An interactive map that allows the user to drag a tooltip and filter neighborhoods, cuisines, and ratings to identify restaurants in Pittsburgh.

Product Management Jewelry Market Strategy | *Python (Selenium)*
- I used Selenium to scrape search results from Amazon to determine what factors determine successful search engine optimization via regression analysis. This informed a marketing strategy for a small jewelry company.

SKILLS

Languages: JavaScript (D3, Vue, Angular), Python (NumPy, pandas, matplotlib, BeautifulSoup, GeoPy), C#, Java, SQL, HTML/CSS
Concepts: Web Design & Development, Selenium, Data Visualization, Project Management, Product Management, Git/GitHub, Cloud Computing (Azure), Data Visualizations (Tableau, D3.js)