



malvika mathur

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[LinkedIn](#) | [Github](#) | [Portfolio](#)

Professional Summary

Diligent data scientist possessing solid skills in data mining and visualizations. Proficient in Python, Pandas, Tableau, as well as relational and non-relational databases. Exceptional at multitasking while working in a fast paced environment delivering high quality products to clients. Consistently exceeds goals and company expectations.

Recent Projects

Natural Language

Created a Machine Translation System based on Recurrent Neural Network with Keras deep learning model. Acquired, cleaned, and prepared datasets using Pandas and Python. Built a model of the datasets using Keras. Trained and tested the model, developed it using Flask and deployed the app.

License to Kill

Explored the effects that drinking and driving has in relation to law enforcement, liquor sales, and metro usage. Mined data through pandas and NumPy. Created an app using SQLAlchemy and Javascript. Used front end to create a visual dashboard using Javascript libraries, Plotly and D3.

Effects of Legalization

Developed, mined, and cleaned-up data in using Pandas and NumPy. Created python functions to analyze, research data and create dataframes. Performed data analysis and created visualization using Matplotlib and Python libraries.

Technical Proficiencies

Python Programming

- Python 3
- NumPy
- Pandas
- Matplotlib
- API Interactions
- Social Media Mining

Databases

- MySQL
- MongoDB

Front-End Web Visualization

- HTML
- CSS
- Bootstrap
- Dashboarding
- JavaScript Charting
- D3.js
- Geomapping with Leaflet.js

Business Intelligence Software

- Tableau

Big Data

- Big Data Analytics
- Machine Learning

Advanced Excel

- Pivot Tables
- VBA Scripting

Education

George Washington University, Washington D.C.

Data Analytics and Visualization Bootcamp, Data Science

2018

Purdue University, West Lafayette, IN

Bachelors of Science (B.S.) in Neurobiology and Physiology; Minor in Psychology

2011

Experiences

Merck Millipore

Report Analyst, Toxicology and Analytical Services

Rockville, MD
Jan 2017- Present

- Manages activities to ensure project progresses within proposed timeline, increasing on time delivery by 50%
- Strategically mitigates potential risks and creates effective solutions based on client and company needs, decreasing the amount of reported findings by almost 25% per quarter
- Consults with clients to determine their priorities and implements business processes to achieve client goals
- Prepares on average 10 project reports and amendments per week for management, clients and internal associates in accordance with federal and health regulatory agencies
- Increases revenue flow by 40% through managing scientific teams in delivery of high quality products to clients
- Creates and analyzes trend in Excel for data findings and deviations within a project

Merck Millipore

Associate Scientist III-Genetic Toxicology- Bacterial Mutation

Rockville, MD
June 2013- Jan 2017

- Advised healthcare and pharmaceutical clients of data and served as a primary scientific resource
- Led the team in ideas to improve standard lab techniques, protocols, processes and advises department faculty of factors that may affect quality and usefulness of data
- Executed and demonstrated expertise of plating Ames Tests; plate incorporation (PLI), pre-incubation (Pre-Inc) design, and Treatment and Plating
- Developed SOPs in regards to assay and safety procedures, and analytical assay development

Innovative Biosensors, Incorporated

Associate Scientist, Manufacturing and R&D

Gaithersburg, MD
Dec 2011-June 2013

- Manufactured cell-based biosensors and created new methods for the creation and utilization of biosensors to increase accuracy and efficiency of detecting pathogen related diseases
- Compiled, analyzed, and interpreted scientific data via tables, charts and graphs in Excel
- Created, collaborated, and modified protocols, and SOPs, of molecular and protein based assays in order to ensure precise and efficient results for all present and future needs
- Created and tested B-cell lines using Bio Flash-DX to investigate diagnoses and treatments of infectious diseases to market commercially

MedImmune

Research & Development Associate II, Analytical Biochemistry

Gaithersburg, MD
May 2011-Dec 2011

- Performed several variations of high-performance gas chromatographic and chemical-based assays for the analysis of biopharmaceutical products and vaccines
- Conducted qualification studies, created detailed technical reports and statistical analyses in compliance with GMP regulations, as well as FDA regulatory requirements of vaccine and drug testing

Publications

"A Comparison of 24 Chemicals in the Six-Well Bacterial Reverse Mutation Assay to the Standard 100-mm Petri Plate Bacterial Reverse Mutation Assay in Two Laboratories", Regulatory Toxicology and Pharmacology, 2018