

Viraj Vhatkar

SF Bay Area, CA | (510) 495-4401 | virajvhatkar6@gmail.com | [linkedin.com/in/viraj-vhatkar](https://www.linkedin.com/in/viraj-vhatkar) | <https://viraj63.github.io/virajvhatkar/>

EDUCATION

State University at New York, Buffalo

Buffalo, USA

Master of Science, Data Science

Graduation Date: December 2023

- Certifications: Tableau Data Viz Challenge 2021, AI for Medical Prognosis, Python Data Analysis, Neural Network and Deep Learning

PATENTS & PROJECTS

Apple Through My Eyes

- Gathered and synthesized data from diverse sources like Wikipedia and Kaggle using Pyscrappy and SQL, creating a refined dataset for analysis.
- Cleansed and transformed data meticulously (Python, NumPy, Pandas, MS Excel), investing time to eliminate duplicates, manage missing values, and mitigate outliers, elevating data quality for enhanced analytical utility.
- Created an engaging Tableau dashboard featuring strategic visualizations, facilitating the communication of key findings; integrated the dashboard into the project website and shared via LinkedIn to extend reach.

Lay Off Trend

- Utilized Python analytical libraries (NumPy, pandas, Plotly, math) and Kaggle to construct a data analysis project, visually depicting the repercussions of COVID-19 on layoffs across diverse sectors and cities in 2020.
- Orchestrated the fusion of React.js and CSS, enabling dynamic visualizations through D3 and Plotly, shedding light on the hardest-hit industries and geographic areas.
- Illustrated proficiency in economic analysis, data visualization, and continuous project refinement to enhance user interaction and engagement.

Medicine Waist Pouch - Patent

- Invented a wearable Smart Medicine Pouch, integrating a GSM module within its design to provide timely medication reminders through voice messages and text notifications, ensuring users adhere to their prescribed medication schedule.

HEART FAILURE Prediction using Machine Learning & Statistical Techniques.

- Utilized data extracted from UCI (University of California, Irvine) for predictive modeling of heart failure using machine learning techniques, specifically Logistic Regression and Naive Bayes. Employed statistical analysis, including t-tests, chi-square tests, and p-value analysis, to identify the most significant variables for predictive modeling, following the methodology outlined in a referenced research paper.

Ogauge Pressure Transmitter Accuracy Test

- Led IoT-enabled O gauge Pressure Transmitter project, conducting Performance and Accuracy Tests integrated with Micro 820 PLC; analyzed time series pressure data (ARIMA), employed statistical parameters (ACVF, Autoregressive ie AR, etc) for reliability, and created predictive Auto-regressive models (MS Excel, Python, Scikit-learn) to enhance efficiency and reduce maintenance.

WORK EXPERIENCE

Photon Legal

Pune, India

Research Engineer

Feb 2022 - August 2022

- Collaborated with IP Group attorneys to analyze patent filings, develop effective patent strategies, provide expert counseling, and successfully file 12+ FER and OA for patents, while also supporting 6+ ongoing patent litigations and multiple potential disputes.
- Played a key role in obtaining trademark protection and gaining a comprehensive understanding of patent and trademark filing processes.

Kaustubha Udyog

Pune, India

Instrumentation and Control Engineer

June 2021 - Jan 2022

- Collaborated within a 5-member team to meticulously calibrate the Electronic O-gauge, identifying malfunctions across 5 testing phases for enhanced precision.
- Detected and resolved bugs in both the Mobile App and Dashboard algorithm, optimizing the user interface system for improved functionality, while also conducting precise Accuracy tests at COEP's Instrumentation Lab to maintain quality standards and prepare for audits and regulatory inspections

SKILLS & INTERESTS

Skills: R Studio, Tableau, Python, SQL, C, C++, Java, SAP, ERP, IOT analytics, Data Analysis, React js, CSS, Matlab, Microsoft Office (Excel, Word, PowerPoint), Communication, Critical Thinking, Problem-solving,

Interests: Playing Cricket, Hiking, Cooking, Cycling