JAINAM AVLANI

EDUCATION

University Of Illinois, Urbana Champaign: Master's in information management

Relevant Course: Programming in Analytics & Data Processing, Data Warehousing & Business Intelligence, Systems Security Management, Network Security, Risk Management.

University Of Mumbai: Bachelor of Engineering in Information Technology

TECHNICAL SKILLS

Languages and Technologies: Python, R, SQL, Java, C#, CISCO Wireless Network, HTML5, CSS3
Python Libraries: Flask, Django, NumPy, Pandas, Matplotlib, TensorFlow, NetworkX, Pytorch, BeautifulSoup, OpenCV
Machine Learning: Classification, Regression, Unsupervised Learning, Time Series Analysis
Security: FIPS, NIST, Privacy Threshold Analysis, Privacy Impact Assessment, Risk Assessment
Tools and Project Management Skills: Tableau Desktop, Power BI, Microsoft Office Suite, Amazon Web Services (AWS), Google Cloud Platform (GCP), Agile and Scrum Development, JIRA

PROFESSIONAL EXPERIENCE

Department Of Kinesiology and Community Health, UIUC - Data Scientist   *May 2022 - Present*
- Pre-processed **Electronic Health Record** data for COVID-19 and visualized exemplary data for useful insights.
- Added recruits in the database for efficient **indexing and faster data retrieval** using **SQL** and found the **correlation** between diagnosis of depression and COVID-19.
- Prepared **ML classification model** in Python to predict the possibility of post-COVID depression based on the medical history of patients.

Cisco Systems Inc. (Remote, USA) - Data Scientist   *May 2022 - Aug 2022*
- Built and deployed an end-to-end classification model for sales prediction of financial data outputting a **91% accuracy.**
- Performed **EDA (Exploratory Data Analysis), Feature Engineering & Selection, Training, Model Evaluation & Productionization.**
- Executed **Churn Analysis** to establish the attributes causing clients to churn using **Mutual Information Classifier.**
- Implemented sentimental analysis for competitor analysis for network security products using **Tweepy.**

Business Intelligence Group - Client Project   *Jan 2022 - May 2022*
- Utilized **NIST 800-53 rev-5** to review implemented controls and enter information into the Requirements Traceability Matrix (RTM) and findings into Security Assessment Report.
- Reviewed provided or requested artifacts and Plan of Action and Milestones (POAMs) to determine if controls are implemented correctly.
- Reviewed information security system policy and established security baseline in accordance with **FISMA, FIPS and NIST**.

TSS Consultancy Private Limited, Mumbai, India - Full Stack Software Developer   *Nov 2020 - Jun 2021*
- Upgraded existing financial software of banks for **customer verification to predict financial crime** according to government guidelines by adding relevant functions in **C# and AngularJS thereby enhancing the database.**
- Managed **change requests, trouble calls** and **resolved about 150+ bugs** effectively using **PL/SQL, HTML5, CSS3** thereby **reducing 25% of trouble tickets over 8 months.**
- Promoted **Agile software development framework**, enabling periodic task delivery to the client, hence increasing **customer satisfaction.**

Docsumo - Business Analyst Intern   *Sept 2018 - Oct 2020*
- Developed, documented, and reviewed business plans, determined KPIs and coordinated the measurement result.
- Gathered information, analyzed new products and services, and allocated relevant data to different teams.
- Created document tracking and management system.
- Assisted with numerous audits using 100% sampling to identify potentially unseen gaps.
- Assisted in documenting the patent service offered by Docsumo.

ACADEMIC PROJECTS

Enhanced Movie Recommendation System

- Developed a **collaborative-filtering model** using **Matrix Factorization** over Py**Spark** for prediction & recommendation.
- Scaled parameters using **Alternating Least Squares** of **regularization parameter.**
- An **RMSE** of **0.72** was obtained. The system could predict the top N movies for a particular user based on their ratings for other movies.

Gender Recognition System *[Research Paper published with IRJET (e - ISSN: 2395-0056)]*

- Reconfigured **VGG-16 Convolution Neural Network** architecture using **TensorFlow** & **OpenCV** for gender classification.
- Implemented **YOLO algorithm** to detect and extract faces from live image feed for image classification.
- Acquired an **accuracy of 98% on the model** for the validation dataset.
- Documenting, reviewing, and publishing research paper with IRJET.

Big Data Analysis for Capital Bikeshare (Washington D.C.)

- Pre-Processed and ingested BIG data of approximately **100 GB** into MongoDB using Python's **PyMongo client.**
- Filtered **700K** document-based JSON objects for exploratory data analysis MongoDB using Mongo charts.
- Loaded around **80GB** data into a **GCP** bucket for querying desired data using **Big Query** and **SQL workspace.**
- Compared and gained inference regarding query performance between SQL and NoSQL database engines.

Coronavirus Tracker Web Application

- Developed a front-end web app using **thymeleaf** that displays the statistics of Covid cases of around **200** countries/cities.
- Built an API that scrapes data using **ApacheCSV** library with a retrieval time of less than **1** second from a Git repository.
- Processed jar file of the Java app, stored it on **Amazon S3** and then hosted it on **AWS** using the **Elastic Beanstalk service.**