

Shivam Vats

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EDUCATION

University of Colorado, Boulder

Aug 2022 – May 2024

Masters in Data Science

Relevant Coursework: **Statistical Methods and Applications, Data mining, Machine Learning**

University School of Information, Communication and Technology, New Delhi

Aug 2016 – May 2020

Bachelor of Technology in Computer Science

GPA - 8.27

SKILLS

- **Programming Languages:** Python, R, SQL, Javascript, NodeJs, ReactJs, HTML, CSS.
- **Data Analysis:** Pandas, Numpy, Scikit-learn, Keras, Tidyverse, R-Markdown, Matplotlib, Seaborn, Tableau, Selenium
- **Certifications:** Deeplearning.AI, AWS Solutions Architect Associate, Data Science and Machine learning in Python

PROFESSIONAL EXPERIENCE

Amazon Web Services, Hyderabad, India

Cloud Support Engineer – 1

Jul 2020 – Aug 2022

- Designed and developed React-Redux application for customer support engineers reducing time taken by an average support engineer to debug an AWS Organizations ticket by 18%.
- Built an NLP regression model to score customer's sentiment on a scale from 0 to 100 using the text data present in a support ticket. Leveraged NLTK and naive-bayes packages in python and improved the accuracy to 75% using TF-IDF.
- Assisted 200+ customers in real-time via calls and chats to debug security and monitoring components of cloud applications. Solved 700+ tickets on services like Amazon Cognito, S3, IAM, EC2 and performed 90+ quality reviews of problem solving.

Cloud Support Intern

Feb 2020 – Jul 2020

- Automated the monitoring of authentication events and migration of AWS Cognito users to facilitate disaster management and security compliance. Leveraged AWS Lambda, CloudFormation and CloudWatch to build the backend logic.

Marsplay, New Delhi, India

Aug 2020 – Jun 2021

Full Stack Web Developer Intern

- Built search engine optimization scripts in NodeJS that increased weekly average number of visits to website by 10%.
- Tackled unauthorized access to the website by devising a mechanism that automatically blacklist unused JSON Web Tokens.

PROJECT EXPERIENCES

Its Ronaldo [\[link\]](#)

Aug 2020 – Dec 2020

- Performed data analysis and machine learning on game statistics of Cristiano Ronaldo. Cleaned, analyzed, and visualized data using Numpy, Pandas, Matplotlib and Seaborn. Conducted PCA along with multivariate analysis for feature selection.
- Implemented logistic regression, SVM, random forests and KNN using scikit-learn to classify if a shot is converted to a goal.
- Architected deep neural network leveraging Keras and performed hyper-parameter tuning using scikit-learn. Applied the concept of cyclical learning rates to improve accuracy of classification by 10%.

Sahayata [\[link\]](#)

Aug 2020 – Dec 2020

- Programmed data scraping scripts using Selenium to gather rice crop data from 2001 to 2012 in North Indian districts.
- Engineered ETL pipeline in python and performed visualizations using Matplotlib and Tableau to garner trends and patterns.
- Studied the performance of machine learning algorithms such as linear regression and decision trees. Built and leveraged an LSTM model in keras to forecast weekly average price of crops.

Bon Appetit [\[link\]](#)

Jun 2019 – Aug 2019

- Analyzed over 9000 Indian restaurants' cuisines, ratings, and demographics. Mined data using Zomato's API in python.
- Cleaned data using Numpy and Pandas. Further, leveraged gaussian kernel density estimate to visualize numerical features.

ACHIEVEMENTS

Winner – Smart India Hackathon

Mar 2019

Created an application to reduce exploitation faced by farmers due to middlemen. Developed mobile and web application with ReactJs and NodeJs to sell produce online, book crop storage facilities and logistics services. Led the project implementation and presentation.