UTKARSH SHARMA

Shiv Nadar University \$\diamsup\$ India

EDUCATION

Shiv Nadar University, Greater Noida, India Bachelor of Technology, Computer Science and Engineering

July 2017 - July 2021 CGPA: 8.12/10

Selected Coursework:-

Object Oriented Programming in Java, Machine Learning through R, Probability and Statistics, Data Structures and Algorithms, Research Methods in Computing, Discrete Mathematics.

INDUSTRY EXPERIENCE

Dell Technologies

August 2021 - Present

Software Engineer-1

- Responsible for developing REST APIs for enterprise analytics applications using Nodejs and Python.
- Increased the enterprise applications' CI/CD maturity scores by 32% as a member of the DevOps engineering team, which improved the end-user experience of more than 16,000 employees globally by making the applications more secure and stable.
- Involved in stretch projects of TECH CSR (Corporate Social Responsibility), which uses Machine Learning to create in-house products to help underrepresented communities.

RSA Security March 2021 - June 2021

Undergraduate Software Development Intern

- Developed SAML 2.0 authentication integrations with 16 different SaaS providers. Worked on ML models based on KNN to classify security vulnerabilities.
- Created integrations that support Single Sign-On (SSO), RADIUS, and Relying Party protocols using RSA Cloud Authentication.

Dell Technologies

May 2020 - July 2020

Undergraduate Software Development Intern

- Created customized Workday integrations for cloud-based applications to manage and analyze HR and Finance data for APAC (Asia-Pacific) employees.
- Developed a recommendation tool that was deployed to production using Natural Language Processing that extracts the data from resumes with the help of NLTK and uses Cosine Similarity to recommend a suitable candidate according to the job description from a pool of 200 candidates.

AmarUjala Web Services

May 2019 - July 2019

Machine Learning Intern

- Implemented Sentiment Analysis, Intent Analysis, Subject Verb Object (SVO) detection, and auto keyword tagging to create a personalized news feed for more than 8000 users on Amarujala.com

RESEARCH EXPERIENCE

The Role of ESG in Sustainable Development: An Analysis through the Lens of Machine Learning. *Utkarsh Sharma**, Akshat Gupta*, Sandeep Kumar Gupta*

Accepted in 2021 IEEE International Humanitarian Technology Conference

[Paper]

- Developed a novel dataset housing ESG parameters for conducting regression analysis of more than 1400 corporations listed in the stock exchanges throughout the world.
- Presented a framework for region agnostic evaluation of ESG data supported by regression models.
- Built a random forest regressor to accurately predict the growth variables such as "profit margin" and "return on equity" and increased the adjusted R square by 5%.

(* = equal contribution)

Blind Navigation Support System

[GitHub] [Certificate]

- Created an application using React Native to help visually impaired employees navigate. The application was internally deployed in the production environment to 4 different physical sites of Dell Technologies.
- Leveraged computer vision (OpenCV) to gather and process floor and infrastructure data and created a speech-enabled navigation system using Accelerometer, Gyroscope, Proximity, and Magnetic field sensors of the mobile device.

Services and Products Recommendation System

[GitHub]

- Created a web application using Flask(Python framework) powered by Content-Based filtering that used web activity data to recommend products and services.
- The machine learning model provided recommendations from 300 products and 20 different services and used user feedback to improve the recommendations.

Public Tweets Sentiment Analyzer

[GitHub]

- Created a web application to analyze and classify the public tweets into three different sentiments.
- Users could see the statistical breakdown of the sentiments for 5000 recent tweets by providing the hashtag in the search field.

Smart games: Tic-Tac-Toe and Sudoku

[GitHub][GitHub]

- Developed an intelligent Sudoku solver that uses backtracking combined with constraint satisfaction to provide the solution in the most optimal time.
- Created an interactive Tic-Tac-Toe in java that uses magic square game strategy to play against a human.

TECHNICAL STRENGTHS

Programming Languages: C, C++, Python, Java, JavaScript, R, SQL

Technologies: React, React Native, Angular, Flask, Latex, Github, Gitlab, Docker Libraries: Tensorflow, Pytorch, Keras, NLTK, OpenCV, Pandas, Numpy

ADDITIONAL EXPERIENCE AND ACHIEVEMENTS

- Dean's list Awardee for academic excellence (top 10% of School of Engineering).
- Awarded 80% tuition fee waiver at the time of admission to the undergraduate institute (Shiv Nadar University).
- Winner of the IDEA force Hackathon conducted by Dell Technologies.
- Volunteer for Feeding India (A non-profit organization with the aim to reduce hunger in India and provide food for underprivileged communities.)
- Completed a summer certificate program in Advanced Data Structures and Algorithms in Java. [Certificate]
- Online Certification: 'Machine Learning A-Z™: Hands-On Python & R In Data Science.' [Certificate]