Japjeet Singh Rekhi

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EDUCATION

SUNY - Stony Brook University
MSc in Computer Science
Dec 2020 | Stonybrook, NY

SRM University
B.Tech in Computer Science
May 2019 | New Delhi, India

SKILLS

PROGRAMMING
Proficient:
Python • Django • CSS • HTML • JSON • Git • GitHub • Django Rest Framework • RestAPIs • Bootstrap • SQL
Familiar and Used:
Java • Javascript • PHP • Celery • jQuery • Linux • React.js • BeautifulSoup • Flower • Leaflet.js • Selenium • Nginx • PostgreSQL • Ajax • AWS • OAuth

LINKS

Github:
JapjeetRekhi
LinkedIn:
JapjeetRekhi

COURSEWORK

- Data Science Fundamentals
- Theory of Database Systems
- Natural Language Processing
- Analysis of Algorithms
- Probability and Statistics
- Data Structures and Algorithms
- Computer Networks
- Network Security
- Logic in Computer Science

HACKATHONS

Hack@CEWIT 2020 - Analyzed sleep patterns of famous people from different professions by scraping tweets and doing sentiment analysis. Came up with interesting insights for the professions.

EXPERIENCE

POLITECH LAB | Research Project Intern
Jan 2020 – Present | SUNY - Stony Brook University
- Developing an election based analysis tool deployed on AWS EC2 that divides districts based on measures such as population density, race, gender etc.
- Optimized the performance by compressing the data by 20%. Implemented refresh token which allows the user to stay logged in for 30 minutes.
- Built web-sockets for real time data communication for faster data loading.

DIGIGEEKS | Software Engineering Intern
May 2017 - July 2017 | New Delhi, India
- Developed backend services for car racing enthusiast using PHP & MySQL.
- Designed and developed user interfaces with HTML, JQuery, and Bootstrap for single page CMS applications.
- Used PostgreSQL to handle user profile data.

TECHNICAL PROJECTS

E-COMMERCE WEBSITE | Python, Django, DRF, JavaScript
- Developed apparel shopping website using Python and Django with home page, item page, cart and checkout.
- Integrated third party OAuth and also created a search engine based on item specifications.
- Used Django Rest Framework to integrate Stripe and Paypal for payments.

AUTOMATED NEWS SCRAPER | Python, Django, Celery, Flower
- Developed a web scraper using Selenium and Django to collect all the links from a website for news.
- Used Celery for task processing and Flower to monitor the Celery clusters.
- Implemented built-in search and pagination for posts filtering.

GEOTAGGED-IMAGE SERVICE | Python, Javascript
- Developed a chrome extension alerting users about geotags in their images.
- Analyzed and wrote a research paper to highlight the vulnerabilities in Geotagged Images and the policies adopted by social networking websites to tackle it.
- For the case study, drafted a script to scrape images from Flickr, extract EXIF data from images and obtain the GPS coordinates in order to log them into a CSV file.

FINDING PLACES | Python, Flask, Leaflet.js
- Developed a geo-location service using Python and Flask.
- Implemented the app to take in a location and search for near-by places having their own Wikipedia pages.
- Used Leaflet.js to display the nearby attractions on an interactive map.

WORD ANALOGY TASK USING WORD2VEC | Python, NLP
- Implemented Skip-gram Model to learn word embeddings and evaluated them with Cross Entropy and Noise Contrastive Estimation.
- Applied the learned word embeddings to test word analogies and tuned the parameters for better accuracy.