ANJALI BACHANI

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anjalibachani anjalibachani

EDUCATION

University at Buffalo, State University of New York January 2020 to June 2021
Masters of Computer Science
GPA: 3.4/4.0

Vellore Institute of Technology July 2017 to May 2019
Masters of Computer Applications
CGPA: 9.19/10.00

JECRC University July 2014 to May 2017
Bachelors of Computer Applications
CGPA: 9.25/10.00, Secured 2nd Rank with a Silver Medal

RELEVANT EXPERIENCE

Intern - Software Developer December 2018 to August 2019
Axis India Machine Learning Jaipur, India

- Reduced website overhead by 20% by upscaling the conventional JavaScript HTML+CSS website of the company to a single page React App.
- Performed SQL data modelling and built REST API's using NodeJS to handle HTTP requests with CRUD operations on data stored in MySQL.
- Updated, upgraded and set up unit test using Jest and Moc to reduce application big reports by 17%.
- Implemented OAuth2 Security along with PKCE Flow to streamline authorization and Integrated Google Login for authentication.
- Increased website interaction by 25% using SEO Tools like Google Analytics, MozBar, and WooRank.

SKILLS

KNOWLEDGE: Data Structures, Algorithms Analysis, Web Development, Cloud Computing, Data Visualization, Distributed System, Relational Database
LANGUAGES: Java, Python, JavaScript, React.js, Node.js, SQL, Angular.js, CSS, MATLAB, C/C++, HTML
FRAMEWORKS: OpenCV, Tensorflow, Pandas, D3, PySpark, NLTK, scikit-learns, numpy, matplotlib, Keras
TECHNOLOGIES: Docker, Apache Lucene, AWS EC2, Git, JSON, GCP, Apache Spark, Apache Hadoop, Apache SOLR, Jupyter Notebook
SOFT SKILLS: Meticulous, Creativity, Effective Planning, Communication, Perseverance
DATABASES: MySQL, MongoDB

RELEVANT PROJECTS

Database for Medical Records (JavaScript, React, Node, MySQL, CSS,HTML) August 2020 to December 2020

- Created a real-time web-based application that optimized the recording of medical samples collected at the University's Medical Lab.
- Constructed a database for samples, shipments and facilitated lookups for the same.
- Standardized the tracking of shipments for users by providing summarized information of the sample reducing overhead by 30%.

Open IR - Information Retrieval System (Angular, Python, AWS, SOLR, Lucene, CSS, D3,HTML) September 2020 to November 2020

- Devised an IR system with a corpus containing 3 million tweets in 7 languages and 25 countries on "COVID-19".
- Incorporated Location Analysis and Sentiment Analysis to better understand the public response in each country and portrayed using different Data Visualization methods like Data Maps, Timelines, and Graphs.
- Performed Latent Dirichlet Allocation for Topic modeling and applied Faceted search on the indexed tweets.

Detecting Racial Biases in COMPAS (Python, Pandas, NLTK, Jupyter Notebook) April 2020 to May 2020

- Investigated 3 Machine Learning Algorithms to replace the existing COMPAS system - a tool for the judiciary to grant bail.
- Validated and reduced the Model's algorithmic bias towards Blacks and Hispanics based on recidivism and 14 other parameters.
- Enhanced a system that used Naive Bayes Classifier and enforced Equal Opportunity across racial lines to ensure maximum fairness possible.

Big Data Processing using Apache Hadoop (Python, Hadoop) March 2020 to April 2020

- Spearheaded the development of a data processing model using MapReduce framework on Project Gutenberg dataset.
- Implemented word count, N-grams, and inverted index algorithms as layers of the model and used MapReduce to perform relational joins and K-Nearest Neighbors on the dataset.
- Achieved an F1-score of 0.984, comparable to the state-of-the-art model's F1-score of 0.993.

PRESENTATIONS AND LEADERSHIP

Presented a research paper titled "Forex Exchange using Big Data Analytics" February 2019
International Conference on Science, Technology, Engineering and Management (I-STEM-18), Kumaraguru College of Technology (KCT)

Represented "Drowsiness Detection using Facial Expression" November 2017
International Conference on Science, Engineering and Technology, Vellore Institute of Technology (VIT)

Student Coordinator for ISRO Exhibition April 2016
Indian Space Research Organization

Faculty Relations Team Lead for IAESTE India September 2015
JECRC University