Akshat Dinesh Barbhaya

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EDUCATION:

University of Southern California, Los Angeles, CA **August 2018 - May 2020**
Master of Science, Computer Science GPA: 3.1 / 4
Relevant Courses: Algorithms, Web Technologies, Database Systems, Augmented and Virtual Reality

Dwarkadas J. Sanghvi College of Engineering, University of Mumbai, India **August 2014 - June 2018**
Bachelor of Engineering, Computer Engineering GPA: 8.8 / 10

TECHNICAL SKILLS:

- **Languages**: Python, Java, C
- **Database and Web Technologies:** MySQL, Oracle, Amazon Redshift, PostgreSQL, SQL, PL/SQL, HTML5, CSS3, Bootstrap, JavaScript, AJAX, jQuery, Node.js, Angular, PHP
- **Tools:** Eclipse, MATLAB, OpenCV, Git, AWS, GCP, VirtualBox, Visual Studio

WORK EXPERIENCE:

Software Engineering Intern at Ikioo Technologies, Inc. **June 2019 - August 2019**
Burbank, CA

- Developed a medical chatbot to cater patients with diagnosis based on symptoms using *Chatterbot engine*
- Created a *MySQL* database by processing and grouping symptoms and linking it to corresponding diagnosis
- Performed *entity recognition* of symptoms from input and checked them in custom database for diagnosis prediction. Added functionality for making an appointment with the doctor after viewing the preliminary diagnosis

Software Engineering Intern at Herolabs Infotech Pvt. Ltd. (SuperFan.ai) **June 2017 - July 2017**
Mumbai, India

- Improved test accuracy of **87.5%** by performing classification of brand logo images using *TensorFlow*
- Retrained *Inception v3 model* to learn new classes of images using Transfer learning
- Achieved alphanumeric character extraction from Credit and Debit card images using Optical character recognition *Tesseract-OCR* and different pre-processing techniques to optimize results of characters on it

PROJECTS:

Movie Genre Classification using Poster image *(Python, Spyder IDE, Bootstrap, JavaScript, PHP, SQL)*

- Collaborated with a team of 3 to analyze and classify movie posters into genres with Neural Bag-of-Words model
- Performed scraping of data and performed cleaning to detect inaccurate records to form a dataset for next step
- Configured feature extraction and clustered its descriptors into a bag of features through k-means clustering
- Developed final step of feeding Bag-of-Words to train neural network to obtain genre of the poster

Weather Search http://bit.ly/weather-search *(HTML5, CSS3, JavaScript, XML, JSON, PHP, AWS)*

- Developed a web app to search for weather information of a location using Google Geocode and forecast.io API
- Parsed XML-formatted output from Google GeoCode API to extract latitude and longitude values of the location
- Retrieved JSON result from the Forecast.io API to extract and display detailed weather information using AWS

Geospatial Databases *(PostgreSQL, PostGIS)*

- Computed k nearest neighbors and convex hull of a location using PostgreSQL and PostGIS
- Visualized the results on Google Earth using Keyhole Markup Language (KML)

Scraping Youtube videos and videolectures.net through BS4 *(Beautiful Soup, Python)*

- Scraped 1100 youtube videos and extracted features like url, description using GCP API Youtube Data API V3
- Extracted entity information from youtube video description using Open Calais API
- Performed entity linking of person and organization to the associated entity in DBLP and DBpedia

Time-It https://projecttimeit.000webhostapp.com/ *(HTML5, CSS3, Bootstrap, JavaScript, AJAX, PHP, SQL)*

- Created a platform to set user tasks and reminders and to notify it using email and text message
- Added an expense manager for users to keep a track of monthly expenses

Moodle Learning *(AWS, Linux)*

- Deployed and configured Moodle on Ubuntu server using AWS to create a personalized learning environment
- Added functionalities for Admin to modify resources or settings for front page, adding courses and managing files

Distributed Database for Healthcare Management System *(MySQL Workbench, VirtualBox)*

- Created a web app to provide information of clinics, doctors, appointments to patients in Distributed Environment
- Designed fragmentation in DDBS, optimization of query processing and concurrency control by use of locks