CHETAN KUMAR

508-441-7120 | ckumar@umassd.edu | https://www.linkedin.com/in/chetan | http://chetan-kumar.com

WORK EXPERIENCE

Graduate Research Analyst: University of Massachusetts

2017-2018

Analyzed admissions and course enrollment data to find students' performance using R and visualized different patterns and trends using D3. Build machine learning model to predict successful NCLEX-RN (Nursing License Exam).

Software and Web Developer: Web Enthusiasts

2014-2015

Developed and maintained static and dynamic websites for corporate clients with responsive interfaces and optimized content for fast and interactive user experience with server interaction through PHP (Codelgniter) and MySQL.

TECHNICAL SKILLS

Machine Learning: Classification, Regression, Clustering

Statistical Methods: Principal Component Analysis and Dimensionality Reduction, Transfer Learning

Programming Languages: Python, R, Matlab, SQL, C (Parallel Programming), C++, HTML, CSS, Javascript, D3, LaTeX

Data Tools: Numpy, Pandas, Matplotlib, NLTK, Rapid Miner

Tools: Git, Jupyter Notebook, RStudio

EDUCATION

| University of Massachusetts - Dartmouth | 2016-Present |
|--|--------------|
| PhD in Engineering and Applied Sciences (Computer and Information Science) | |
| University of Massachusetts - Dartmouth | 2016-2018 |
| Master of Science in Data Science | |
| Shaheed Zulfikar Ali Bhutto Institute of Science and Technology | 2014-2016 |
| Master of Science in Computer Science | |
| Shaheed Zulfikar Ali Bhutto Institute of Science and Technology | 2010-2014 |
| Bachelor of Science in Computer Science | |

PUBLICATION_

Cross-Database Mammographic Image Analysis through Unsupervised domain adaption

IEEE Big Data Conference 2017, Boston US (DOI: 10.1109/BigData.2017.8258419)

ACADEMIC PROJECTS

- Skeleton Based Action Recognition using Convolutional Neural Network: A skeleton based live working model for action recognition was developed to present the biasness present between synthetic and non-synthetic data. For this purpose Kinect V2 is used to get Skelton representation of 2 persons interactions. View Project
- H-1B Visa Petitions Data Analysis: Visualized and analyzed Kaggle data using R and D3 to determine some important trends and facts such as total visa petitions, total candidates in different job categories from each state. View Project
- Computational Reproducibility: Reproduced Paper "Real Time Robust L1 Tracker Using Accelerated Proximal Gradient Approach" using Matlab and reproduced related Papers for Comparing Experimental Results.
- **Text Processing and Text Mining:** Jupyter Notebook was configured on Stampede (Super Computer) to access it on local machine for performing the text processing and text mining on unstructured data by using Python NLTK library.

PROFESSIONAL SERVICES_

Conference (External) Reviewer

| Association for Advancement of Artificial Intelligence (AAAI) | 2017 |
|---|------|
| International Joint Conference on Artificial Intelligence (IJCAI) | 2018 |
| Journal of Electronic Imaging (JEI) | 2018 |