AKARSH BALASUBRAMANYAM

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EDUCATION

University of Illinois at Chicago – GPA: 4.0/4.0 *Chicago, IL / Aug 2019 – May 2021*

Master of Science in Computer Science

Relevant Courses: Computer Algorithms, Neural Networks, Information Retrieval, Deep Learning for NLP, Visual Data Science, Deep Learning for Computer Vision, Statistical NLP, Introduction to Data Science, Introduction to Machine Learning

BMS Institute of Technology and Management – GPA: 79.56% *India / Aug 2013 – June 2017*

Bachelor of Engineering in Computer Science

SKILLS

Programming Languages:	Python, R, Java, JavaScript/TypeScript, C++
Technologies and Frameworks:	Hadoop, PySpark, Git, Node.js, Angular, Flask, Bitbucket, TestCafe, Docker, Informatica Power Center
Databases:	Oracle SQL, MYSQL, PostgreSQL, MongoDB
Data Analysis and Visualization:	Pandas, TensorFlow, Scikit-Learn, Spacy, Seaborn, Bokeh, Tableau, Vis.js, D3.js, Three.js
Machine Learning:	Regression, SVM, Decision Trees, Random Forest, XGBoost, Neural Nets, imageNets

PROFESSIONAL EXPERIENCE

Intern, Software Development – Ensono LP *Downers Grove, Illinois / June 2020 – Aug 2020*

- Used Angular framework to develop Single Page Application (Agile In A Box) to access and display data from JIRA
- Visualized JIRA stories and their dependencies using Vis.js
- Worked on TestCafe in end-to-end testing and Jasmine for unit testing angular modules with 70% code coverage

Software Engineer – Dell Technologies *Bengaluru , India / July 2017 – July 2019*

- Analyzed and maintained customer data in the production environment by resolving data and hierarchy issues that would occur on a daily basis
- Designed and Developed mappings and transformations using Informatica PowerCenter to extract data from multiple sources and perform Data Warehousing at a central MDM repository
- Developed an Accounts Dashboard - a tool encompassing operational KPI's and SLA's for account transactions using ETL and SQL technologies
- Lead and managed a Level-2 team and trained them to support the Master Data Management application

Under-Graduate Intern - Bharath Sanchar Nigam Limited *Bengaluru , India / Jan 2016 – May 2016*

- Developed a tool using Python that supports automated broadband provision and modification; reduced manual updates by ~50%

PROJECTS

Identifying the right Episode of Care using Visualization *[identifying-episode-of-care.herokuapp.com]* *October 2020*

- Analyze the right Episode of Care for a given condition by visualizing the sequence of procedures using D3.js and Cystoscape.js

Image Captioning using Deep Neural Nets *[Python, Tensorflow, imageNet, LSTM's]* *October 2020*

- Generating image captions using Convolutional Neural Networks and Sequence Models and evaluating performance metrics using BLEU scores

Automatic Text Summarization and Ranking of email corpus *[Python, NetworkX, Spacy, Sklearn]* *May 2020*

- Ranking of email corpus using Information Retrieval and NLP techniques based on frequently used keywords that describe the priority of the email (ASAP, Immediate, Critical)
- Summarized top ranked emails using Page Ranking Algorithm

Analysis of Crime Data (City of Chicago) *[Python, Pandas ,Sklearn, Seaborn]* *November 2019*

- Analyze and predict the type of crime that may occur in the city of Chicago and dictate the possibility of criminal being arrested.
- Achieved an accuracy of 86% predicting the probability of criminal being arrested and a 60% accuracy for the type of crime

Tag Prediction for Stack Overflow Questions *[Python, Pandas ,Sklearn, Seaborn]* *November 2019*

- Predict tags for the questions posted on Stack Overflow and compare performance metrics using different Machine Learning models like Multinomial Bayes, Logistic Regression, Support Vector Machines and Neural Nets

Intrusion Detection using Ad-hoc Communication Networks *[Python, Raspberry Pi , RFID, OpenCV]* *June 2017*

- Designed a cost-effective, autonomous security system using Raspberry Pi and Arduino
- Enhanced two level security using Radio Frequency Identification and Image Recognition