

AKARSH BALASUBRAMANYAM

akarshbalu@gmail.com | akarsh-b.github.io | linkedin.com/in/akarsh-b | github.com/Akarsh-B | (773)-744-4763

EDUCATION

University of Illinois at Chicago – GPA: 4.0/4.0

Chicago, IL / August 2019 – May 2021

Master of Science in Computer Science

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

BMS Institute of Technology and Management – GPA: 79.56%

India / August 2013 – June 2017

Bachelor of Engineering in Computer Science

SKILLS

Programming Languages:	Python, JavaScript, TypeScript, R, Java, C++
Technologies and Frameworks:	Node.js, Angular, Flask, Hadoop, Spark, Git, 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

PROFESSIONAL EXPERIENCE

Intern, Software Development- Ensono LP (Angular Developer)

Downers Grove, Illinois / June 2020 – August 2020

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

Software Engineer – Dell Technologies (ETL Developer)

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 Account Dashboard - a tool encompassing operational KPI's and SLA's for Accounts 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 work by ~50%

PROJECTS

Image Captioning using Deep Neural Nets

October 2020 (Ongoing)

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

Identifying the right Episode of Care using Visualization

October 2020 (Ongoing)

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

Automatic Text Summarization and Ranking of email corpus

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)

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

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

June 2017

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