# Ritvika Nagula

SOFTWARE ENGINEER · FULL STACK WEB DEVELOPER · DATA ENTHUSIAST

AVAILABLE: JANUARY 2019

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## Work Experience\_\_\_\_\_

Trifacta Inc. San Francisco, CA

SOFTWARE ENGINEERING INTERN

Jan. 2018 - Aug. 2018

- Integrated a back-end machine learning model which provides source pattern to target pattern standardization suggestions with the front-end user interface.
- Built a machine learning model to suggest join keys with a ~20% increase in accuracy by wrangling user logs to generate training data.
- Fixed minor UI related bugs and added Mocha unit tests.
- Analyzed product logs to determine the new user retention rates and churn values in a conversion funnel.

#### Education

#### **Northeastern University**

Boston, MA

MASTERS IN COMPUTER AND INFORMATION SCIENCE - 3.42/4

Sep. 2016 - Dec. 2018

• Foundations of Artificial Intelligence, Algorithms, Programming Design Paradigm, Managing Software Development, Parallel Data Processing Using Map Reduce, Machine Learning, and Data Mining

#### **National Institute of Technology**

Raipur, India

May 2016

BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING - 8.35/10

• Analysis and Design of Algorithms, Data Structures, DBMS, Operating Systems, Compiler Design, Computer Networks

#### Skills

Languages: Java, Scala, Python, R, C/C++, Ruby, SQL

Frontend Web Design: HTML5, CSS3, Bootstrap, JavaScript (also ES6), JQuery, React.js, Redux, LESS, SASS

Backend Web Technologies: SOAP and REST API, Node.js, Express, Django, MongoDB

Tools: Spark, Hadoop, Weka, Heroku, AWS, Sahi Pro

# Technical Projects\_

#### **Boston Public Schools Transportation Problem**

Java, Agglomerative Clustering, Agile

• Effectively utilized a hierarchical clustering algorithm in Java as a member of an Agile team to efficiently assign bell-times of schools in order to minimize the number of buses servicing the schools.

#### **Facial Emotion Recognition**

Python, Keras, Tensorflow, Jupyter Notebook

• Built a deep convolutional neural network (CNN) to recognize and classify the human emotion in the images from the Kaggle FER 2013 dataset using Tensorflow wrapped in Keras on Google Cloud Platform.

#### **Predicting Song Downloads**

Scala, Spark, R, ggplot2

• Efficiently predicted the number of downloads of songs from the Million Songs Dataset by implementing a linear regression model in Spark using Scala and performed data analysis of both raw data and results in R.

#### **Mining Yelp Reviews**

Python, Spark, Jupyter Notebook

• Devised a new system of user specific ratings for restaurants by analyzing the latent criteria of reviews from the Yelp Dataset by implementing Latent Dirichlet Allocation in Python and Spark.

#### **Sentiment Analysis of Tweets**

Python, Scikit-Learn, NLTK, Tweepy API

• Analyzed the opinion of the public towards a sale conducted by an e-commerce website in India for 5 days by collecting live tweets and developing a model to determine the polarity of the tweets using machine learning and natural language strategies in Python, Scikit, and MySQL. {Link - IEEE Research Paper}

### Extra Projects\_

**IRC-Chatroom**, a clone of IRC chatroom implemented using Node.js, Sockets.io and Express.

**Typing.js**, a micro-plugin coded in JavaScript to emulate typing animation effect in a browser.

The Good Reader Bot, a Facebook chatbot integrated with the Goodreads API to get information about books.

**Document Classifier**, a Python Flask app deployed on Heroku to classify documents using Random Forest Classifier.

Word-A-Diction, an Android application to help improve the vocabulary of the users using AndroidStudio.