

# Vaibhav Joshi

193 River Meadow Dr, Rochester, NY 14623

☎ 585 309 1539

| ✉ [vaibhav.joshi231@gmail.com](mailto:vaibhav.joshi231@gmail.com)

| 🏠 [vaibhavjoshi.me](http://vaibhavjoshi.me)

| 📺 [joshivaibhav](https://www.youtube.com/channel/UCv3v3v3v3v3v3v3v3v3v3v3)

| 📺 [joshiv](https://www.youtube.com/channel/UCv3v3v3v3v3v3v3v3v3v3v3)

## Education

### Rochester Institute of Technology

Rochester, NY

MASTER OF SCIENCE IN COMPUTER SCIENCE ( GPA : 3.17 )

Aug 2018 - Dec 2020 (Expected)

- **Coursework:** Data Structures & Algorithms Analysis, Advanced OOPS, Computational Problem Solving, Big Data & Visual Analytics, Cryptography & Data Security, R-DBMS, AI, Software Defined Networking

### Dharmsinh Desai Institute of Technology

Nadiad, India

BACHELOR OF ENGINEERING IN COMPUTER ENGINEERING

Aug 2014 - May 2018

- **Coursework:** Computer Networks, Software Engineering, Microprocessors, Data Mining, Discrete Math, Service Oriented Architecture, UNIX Scripting and Tools, Operating Systems, Image Processing

## Skills

<b>Languages</b>	<b>Proficient:</b> Python, Java   <b>Intermediate :</b> C   <b>Familiar with :</b> R, MATLAB, Assembly, Prolog
<b>Web Technologies</b>	HTML/CSS, JavaScript/jQuery, Bootstrap, JSON, REST-API, Node.JS, PHP
<b>Database</b>	MySQL, PostgreSQL
<b>Other Technologies</b>	Flask, AWS S3, Git, Tableau, Mininet, TensorFlow, Scikit-learn, Jupyter, Pandas
<b>Operating System</b>	Linux (Ubuntu, CentOS), Windows, MacOS

## Work Experience / Internships

### AMAZON

Seattle, WA

SOFTWARE DEVELOPMENT ENGINEER INTERN

May 2019 - Aug 2019

- Analyzed customer utterances on to extract phonetically similar words that may be misinterpreted by Alexa. Used a combination of Levenshtien distance and phonetic algorithms (Soundex, Metaphone-3) to pinpoint the words. Analyzed utterances were to be provided to the voice modeling team for improvements.
- Designed and implemented an end-to-end mechanism that automates the existing manual and technical approach for adding items to Alexa's database per locale. Infrastructure consisted of Flask, AWS S3 and REST API. Saved valuable time of data associates and development.

### BHASKARCHARYA INSTITUTE OF SPACE AND GEOINFORMATICS

Gandhinagar, India

RESEARCH AND DEVELOPMENT INTERN

Dec 2017 - April 2018

- Implemented a web-based solution streamlining the operation of GeoServer right from workspace creation to shapefile rendering. Integrated custom REST API with underlying Geoserver API with a Java backend. Lead to noticeable reduction in the development times of BISAG scientists.
- Rendered shapefiles as full-fledged maps on Geoserver with added distance measuring and label marking capabilities. Shapefiles loaded in PostgreSQL 10.

## Projects

### AMAZON REVIEW ANALYSIS

Python, Tableau

APRIL 2020

- Mined Amazon customer reviews for detecting trends and generating insights. Employed Birch clustering to group book reviews and SVM for classifying helpful reviews with 70% accuracy. Used Tableau for visualizing trends and underlying patterns.

### NET2TEXTQUERY

Python, Flask, HTML/CSS, MySQL

DECEMBER 2019

- A web-based application facilitating query-based network traffic analysis. Inspiration drawn from [Net2Text](#).

### CUSTOM SDN CONTROLLER

Python, Mininet, OpenFlow

NOVEMBER 2019

- Designed and implemented a from-the-scratch Software Defined Networking (SDN) Controller in Python mimicking (minimal) functionalities of Ryu, OpenFloodLight. Deployed the network via Mininet and Oracle VM via the OpenFlow protocol.

### EXPLORING DISCOURSE IN REDDIT

Pandas, Scikit-Learn, TensorFlow

JANUARY 2019

- Pitted Neural Networks against a gamut of classifiers such as Naive Bayes, Decision Trees, SVM in classifying posts into subreddits. Accuracies were reported in the range of 85-90%. Neural Networks outperformed classifiers when data was scaled.

### DATA STRUCTURES AND ALGORITHMS VISUALIZATION

JavaScript, SVG.js, jQuery

APRIL 2017

- A GUI based interactive tool to learn popular data structures and algorithms commonly asked in interviews. Deployed [live](#).