# **HARSH SHAH**



# (929)-444-5923 | shah.hm20@gmail.com | GitHub://harshshah94 | LinkedIn://harshshah094 -(QR CODE) SUMMARY

- Experienced software engineer with diverse skill set in software architecture, data analysis and text processing
- Adept at overseeing all phases of SDLC from design, implementation, analytics and text processing
- Demonstrated skills in full-stack development and Amazon Web Services (AWS)

#### **EDUCATION**

Master of Science, Computer Science, University at Albany, SUNY

Bachelor of Engineering, Computer Science, Gujarat Technological University, India

May 2019 (GPA: 3.94) June 2015 (CGPA: 7.48)

#### SKILLS

Languages: JAVA 8, Java SE, Java EE, PL/SQL, NoSQL, HTML5, CSS3, python

Frameworks and tools: Spring boot, Hibernate, MyBatis, Angular, Bootstrap, NodeJS, ExpressJS, MongoDB, Flask

**Design Patterns:** Singleton, Factory, Adapter, Observer

Others: Git, Agile Methodology, Amazon Web Services (AWS), RESTful API, scrapy, Natural Language Toolkit(nltk)

# **RELEVANT EXPERIENCE**

Graduate Research Assistant, University at Albany, State University of New York

January 2019 – Present | Link

Environment: - AngularJS, NodeJS, MongoDB, python, Flask, natural language toolkit(nltk), wordcloud

- Involved in developing Angular based controllers and services in Knowledge Forum (KF)
- Developed and integrated wordcloud feature between student notes and key concepts in educational software
- Responsible for developing curriculum mapping feature which provides analytics about student notes

Project Research Assistant, The Research Foundation for SUNY, Albany, NY

June-2018 – December 2018

Environment: - python, Gensim, Word2vec, Natural Language Toolkit (nltk), SQL, scrapy

- Responsible for collecting, processing and storing large scale textual data with NLP concepts
- Managed to crawl articles from different websites using selenium webdriver and scrapy tools
- Involved in building model that generates messages based on target term and source domain

Software Engineer, Cybage Software Pvt. Ltd., Pune, India

April 2016 – June 2017

# Environment: - Java EE, Spring, Hibernate, REST web services, JUnit

- Contributed in developing customer functionalities in banking domain using Hibernate framework
- Developed controllers for request, response paradigm by Spring controllers using Spring-MVC
- Developed RESTful web services for Order API in an electronic commerce web environment
- Implemented unit test cases using JUnit to the APIs which built for the ecommerce web application

#### **ACADEMIC PROJECTS**

picShare, University at Albany, State University of New York

January 2018 – May 2018 | Git Link

# Environment: - Java EE, Spring Boot, Spring data JPA, Facebook Graph API, MVC, MySQL, AWS, RDS, EC2

- Developed and maintained social networking platform to share image with annotation as post
- Integrated Facebook Graph API, provided Login with Facebook functionality and friend list access
- Configured Spring data JPA with MySQL on RDS instance to persist the object state at different stages
- Utilized Amazon Web Service by storing data on RDS instance and hosting application on EC2 instance

Go-Ami-Go, University at Albany, State University of New York

January 2018 - May 2018 | Git Link

# Environment: - Angular, NodeJS, ExpressJS, MongoDB, HTTP Client API, Bootstrap, HTML5, CSS3

- Built smart trip planner with budget management, restaurant suggestions and gallery management
- Implemented HTTP Client API in Angular to communicate with backend services over HTTP protocol
- Developed user-functionalities on front-end side for the manage trips module and wrote services
- Established communication between MongoDB and ExpressJS framework to service requests

Suicide Sentiment Analysis, University at Albany, State University of New York

January 2018 - May 2018

# Environment: - Twitter REST API, TF-IDF, matplotlib, Support Vector Machine (SVM), Logistic Regression

- Collected 5000 tweets related to suicide in a geographic region using Twitter REST API
- Calculated and analysed the precision and recall measures on collected tweets
- Presented box plot and histogram for followers and status of collected tweets' users
- Built classification model (70 +/- 8) using linear SVM, nonlinear SVM and logistic Regression techniques

# Document Classifier, University at Albany, State University of New York

August 2018 – December 2018

## Environment: - TF-IDF, python, Support Vector Machine, K Nearest Neighbour, Naïve Bayes, Logistic Regression

- Used BBC news data-set containing more than 2000 articles of 5 various categories
- Transformed raw text of each article to a feature vector by using TF-IDF technique
- Plotted 2200 documents having 14000 features in 2D by using dimensionality reduction techniques
- Trained KNN, SVM, Multinomial Naive Bayes and Logistic Regression Model
- Calculated accuracy by K-fold cross validation and evaluated each model using confusion matrix

# Food Detection, University at Albany, State University of New York

August 2018 - December 2018

# Environment: - YOLO (You Only Look Once), COCO dataset, Annotation tool

- Explored workflow of YOLO (You Only Look Once), YOLO9000 and YOLO v3
- Annotated images from COCO dataset and converted boundary box co-ordinates using Annotation tool
- Examined predictions using both self-trained and pre-trained models of YOLO

### EzzyGo, Centre for Development of Advanced Computing

December 2015 – January 2016 | Git Link

# Environment: - Java EE, Spring, MySQL, MVC architecture, JSP, JSTL, HTML

- Established a SQL-Java EE based online environment for the ticket reservation system
- Utilized MVC architecture for simultaneous development and low coupling
- Designed relational schemas, created corresponding tables and managed the database
- Developed business logic of receiving ticket as an email upon successful reservation

# Home Automation System, Nar Narayan Shastri Institute of Technology

July 2014 - May 2015

## Environment: - Beaglebone black, relay, python, debian

- Developed a system to operate devices using web application through WLAN network
- Utilized beagle bone black development platform and relay for hardware support
- Established communication over WLAN network through python scripts

# **CERTIFICATION AND AWARDS**

Coursera Certification - Neural Networks and Deep Learning from deeplearning.ai

April 2019 | Certificate

Awarded scholarship for 9 credits by SUNY Research Foundation, Albany

Fall 2018

- Post Graduate Diploma, Advanced Computing, C-DAC Advanced Computing Training School, Pune January 2016
- 3rd position (out of 100 teams), National round of I-Touch Robotic Arm at Indo-US Robo League March 2014