

+1 (213) 3730183

sharaff@usc.edu

linkedin.com/in/nitusharaff

github.com/nitusharaff

nitusharaff.com

EDUCATION

Masters in Computer Science (Data Science Track), 2018-2019

University of Southern California
CGPA- 3.5/4

Coursework: Machine Learning
Artificial Intelligence, Algorithm
Design & Analysis

Bachelors in Computer Science

Vellore Institute of Technology,
2013-2017
CGPA – 9.5/10

SKILLS FRAMEWORKS

- | | |
|----------|----------|
| • Python | • Hadoop |
| • R | • Github |
| • C/C++ | • Flask |
| • HTML | • APIs |
| • CSS/JS | • MYSQL |

ACHIEVEMENTS

Undergraduate Rank Holder,
Computer Science VIT University

Paper Presentation, Data
Science Congress 2017, India

Most Innovative Project 2015,
Microsoft

Windows App Development, 3rd
Microsoft, 24 hours hackathon

EXPERIENCE

STANFORD UNIVERSITY & USC | HaRVI Lab, USC | Jan 2018-Present

Research Assistant (with Prof. Heather Culbertson)

- Working on a Haptic sleeve, a new wearable device that creates a “haptic illusion” using tiny speakers that indent into the skin to simulate gestures in social touch like strokes, pokes, taps, etc. for different types of emotions.
- The data for gestures collected using a study is imitated by applying PCA to the data coded in Python to provide the feeling of social gestures. 3D Convolution Neural Network and SVM was used for classification of emotions.

NANYANG TECHNOLOGICAL UNIVERSITY | Multimedia Lab | Jan-June 2017

Research Assistant (with Prof. Chng Eng Siong)

- Built a software using Python and Flask framework for user logging (keyboard and mouse movement) during stimulus through a survey for emotion analysis.
- The project also aimed to find the best integration of hardware and software for data acquisition from biosensors like eye tracking, facial recognition, ECG, EEG, etc. for emotion analysis of a subject.

ACADEMIA SINICA | Center for Innovation and Technology | June-July 2016

Research Intern (with Prof. Chih Yu Wang)

- Integrated and built a Support Vector and Random Forest model for the cross social media data of Yelp and Groupon to understand the impact of ratings and offers on demand of a product using R language.

PROJECTS

SIGN LANGUAGE GLOVE | VIT UNIVERSITY | Jan-May 2017

- Created glove that can translate American Sign Language into text or speech and vice versa using Python with Flask Framework and deep learning algorithms to predict words or phrases in real-time. (Bachelor Thesis)

SCALABLE APPROACH TO NETWORK IDS | June 2017

- Carried out a study for scalable and non-scalable approach using Apache Spark and R to identify the right processing platform for different volume, velocity and variety of data using supervised learning techniques on network IDS data.

MUSIC DISCOVERY | MICROSOFT CAMPUS CONNECT | May- October 2015

- Created a Music Discovery Engine using Flask that fetches queries, visualizes data through D3.js and searches through EchoNest API; converted it into a Digital Application using Project Westminster by VS 2015. Awarded Most Innovative Project.

BOSCH PRODUCTION LINE ANALYSIS | KAGGLE

- Worked on Kaggle Project of Bosch Production Lines to detect faulty quality of goods manufactured in stations using supervised Machine Learning algorithms.