SAINAG SHETTY

2516 Avent Ferry Road, Raleigh, NC 27606 | (984)-218-6403 | sgshetty@ncsu.edu | linkedin.com/in/sainagshetty | sainagshetty.github.io

EDUCATION:

North Carolina State University **Current GPA: 4.0/4.0**
Master's of Computer Science August 2017 - May 2019(Expected)
- **Courses**: Foundations of Data Science, Design and Analysis of Algorithms, Automated Learning and Data Analysis, Advanced Data Structures, Software Engineering, Data-Driven Decision Making

University of Mumbai **GPA: 9.11/10**
Bachelor of Engineering- Computer Engineering August 2013 - May 2017
- **Courses**: Soft Computing, Data Warehousing & Mining, Artificial Intelligence, Distributed Databases, Object Oriented Analysis and Design, Computer Networks
- Awarded the **Certificate of Excellence** for holding an Institutional Third Rank in BE (Computer Engineering)

SOFTWARE SKILLS:

- **Languages**: Python, C, C++, Java, Node.js, R
- **Technologies and Tools:** Git, AWS, Photoshop, PyCharm, LaTeX, XAMPP, RStudio
- **Databases**: MySQL, MongoDB, NoSQL
- **Web Languages:** JavaScript, PHP
- **Operating Systems:** MacOS, Linux , Windows

PROFESSIONAL EXPERIENCE:

Hippily Technology Pvt. Ltd. Software Developer Intern Summer 2015
- Analyzed the company's system for providing personalized products for the users.
- Developed front-end features and User Interface tweaks across the Android application of Hippily.
- Incorporated a camera functionality to the application which allows users to take pictures and it is stored on the server.

ACADEMIC PROJECTS:

Task Scheduling Bot (Node.js, Python, AWS, Google Calendar API, MongoDB) Ongoing
- Developed an algorithm which uses the student's tasks and courses to generate a personalized schedule
- Used Node.js for developing the bot and Python for the scheduling algorithm using MongoDB for the storage for data

Finding sister cities (Python, Unstructured Text Analytics, NLP) Ongoing
- Developing an application that takes different parameters such as Demographics, Culture, Economy, Climate and Politics to predict which are the sister cities to the input city
- Using structured data from sources such as Census, & .gov sites, along with news articles for the unstructured text analytics.

Simulating Game Agent using Q-Network (Python, TensorFlow, Keras, Q-Learning, Deep Learning, Game Simulation) (2017)
- Created an Agent to play the game Flappy Bird with Deep Q Learning, a Reinforcement Learning Technique.
- Developed a convolutional neural network, trained with a variant of Q-learning, whose input is raw pixels and whose output is a value function estimating future rewards.

Mammogram Classification (SVM, CNN, Decision Tree, K-Means, Python) (2017)
- Analyzed different implementations such as SVM, Convolutional Neural Networks, K-Means, Decision Tree, Regression for classification.
- Developed an implementation using modified K-means called Adaptive K-Means Algorithm.

Object detection and estimation (Python, OpenCV, R-CNN, APIs) (2017)
- Designed an application that detects everyday objects and took the information to provide purchase links from Flipkart.
- Recognition of the object was done using YOLO framework based on R-CNN. The model was trained on the COCO dataset.
- Provided the user with purchase links for the detected object using the API's provided by the vendor site.

Webpage Saving System (PHP, JavaScript, MySQL) (2016)
- Developed an online news articles and webpage saving system which stores the content without any clutter such as adverts
- Utilized the AlchemyAPI for fetching the article content and MySQL to store it in the database

PUBLICATIONS & CONFERENCES:

- Shetty. Sainag, et al. "**Real time object detection and recognition and estimation of price of the object**." International Journal of Research in Science & Engineering Special Issue 7-ICEMTE March 2017
- Shetty. Sainag, et al. "**Detection and Recognition of Objects and Providing Purchase links using APIs**." International Journal of Engineering Science 10897