

SHREYAS GOVINDA RAJU

EMAIL: shreyasg@usc.edu
LINKS: github.com/shreyas-vgr

PHONE: (323) 690-6538
linkedin.com/in/shreyasvgr

EDUCATION

MAY 2018 **University of Southern California**, Los Angeles
M.S, Computer Science
Coursework : Machine Learning, Applied Natural Language Processing, Artificial Intelligence, Operating Systems, Databases and Algorithms.

MAY 2015 **National Institute of Technology Karnataka**, India
B.Tech, Computer Science and Engineering

TECHNICAL SKILLS

Programming Languages: Python, C/C++, Javascript and Shell Scripting.
Web Technologies: Node.js, Bootstrap, Webapp2, Django, Flask and Prototype.
Applications : Apache Storm, Apache Hadoop, MapReduce, Kafka, Jenkins, Redis, d3.js, Heroku, Google App Engine and MySQL.

WORK EXPERIENCE

JAN 2018 - MAY 2018	Software Development Intern, Mathworks (Natick, USA) <ul style="list-style-type: none">- Developed a code signing tool to digitally sign executables of Mathworks product Installers.- Integrated the script as a part of build process in Release Cycle.- Developed a script to categorize job pause times in Build Cycle.
Tech stack	Perl
MAY 2017 - AUG 2017	Software Development Intern, Tintri (Mountain View, USA) <ul style="list-style-type: none">- Built a tool to highlight known fingerprint failures from Tintri platform test result suites.- Analyzed different log files which are filtered with known patterns and time frame for analysis.- Developed an end to end web application to accommodate easy analysis and reporting of bugs.
Tech stack	Python, Django, Bootstrap, JQuery
JUNE 2015 - JULY 2016	Software Engineer, Samsung Research Institute Bangalore (Bangalore, India) <ul style="list-style-type: none">- Developed I/O modules in C++ on an automated caching software tool called Autocache.- Created a web interface for the Autocache stand-alone application with prototype framework.- Discussed implementation plan for flushing cached data into secondary storage drives.- Led in the setup of debugging environment for kernel debugging in RHEL.
Tech stack	C++, Jenkins, Visual Studio, Git

PROJECTS

- **Machine Learning**
 - Implemented linear regression, multinomial logistic regression, and KNN using Python Numpy libraries.
 - Calculated the accuracy of each algorithm on the UCI Wine Quality dataset and MNIST datasets.
 - Developed a multi-layer perceptron neural network with relu and softmax non-linearities.
 - Implemented K-means algorithm to perform clustering and Gaussian mixture model for density estimation.
 - Developed a binary classifier on email dataset from Enron investigation using Naive Bayes classification.
- **Real Time Analytics**
 - Developed a real-time, distributed data processing application for Twitter tweets.
 - Implemented topology linking Spouts and Bolts to evaluate top Trending Twitter feeds.
 - Developed a python script to parse and visualize Top-N Hashtags from Twitter URLs.
 - Created a real-time visualization using Redis, flask server and d3.js.
- **Parser**
 - Built a constituency parser trained from ATIS portion of Penn Treebank.
 - Constructed a grammar from the binary trees along with individual probabilities and most frequent rules.
 - Implemented CKY algorithm to parse input sentences with grammar and evaluated its F1 score.
- **Weenix kernel**
 - Modified a Unix based weenix operating system.
 - Designed and built features such as processes, threads, context switching and synchronization primitives.
 - Developed a Virtual File System (VFS) to provide a common interface between kernel and other file systems.
 - Implemented Virtual Memory (VM) providing an abstraction of address space for user processes.