SRINIDHI SRINIVASA RAGHAVAN

160 Claremont Avenue 1F, New York | (914) 770-2045 | srinidhi.raghavan@columbia.edu
srinidhiraghavan.github.io | linkedin.com/in/srinidhi-raghavan/ | github.com/SrinidhiRaghavan

EDUCATION

Columbia University, Fu Foundation School of Engineering and Applied Sciences　　　Expected December 2017

Master of Science in Computer Science, Machine Learning Track

Coursework: Machine Learning, Cloud Computing and Big Data Analytics, Analysis of Algorithms, Financial Computing, Natural Language Processing, Design using C++, Artificial Intelligence, Programming and Problem Solving, Reinforcement Learning

Teaching Assistantship:　Web App Development using Python, Data Analytics using Python

St. Francis Institute of Technology, University of Mumbai　　　July 2015

Bachelor of Computer Engineering, First Class with Distinction (3.98 GPA), Best Academic Performance in 2012 and 2013

Coursework: Operating Systems, Database Management Systems, Compiler Construction, Data Warehousing and Mining, Soft Computing, Distributed Systems, Human-Computer Interaction

SELECTED ACADEMIC PROJECTS

CliqueLib, Columbia University　　　May 2017

- Built a machine learning library (exclusive for classification and ensemble methods) in C++ using Armadillo matrix and tested it on two use-cases: Face Detection using Viola Jones and Cancer Detection
- Benchmarked the performance for logistic regression, where Cliquelib using Armadillo achieved an accuracy of 85.84 % in 6.54 seconds as opposed to that of MLPack (17.03 sec), Weka (16.2 sec) and sklearn (8 sec)

Multi-layered Dictionary Learning for Face Spoofing Detection, Columbia University　　　May 2017

Dynamic Carpooling Application, Columbia University　　　December 2016

- Developed a real-time carpooling application which does an optimal matching of drivers and riders
- Implemented 500+ lines of code in Python and used AWS features like ElasticSearch, DynamoDB, Beanstalk, SNS and SQS

Video Summarization using Clustering, University of Mumbai　　　June 2015

- Created a stand-alone application which constructed a meaningful summary of the input video within a short time-span using temporal segmentation and clustering techniques like K-Means, Kekre's Proportionate Error and Fuzzy C-Means
- Analyzed the performance on 6 different video categories based on 3 parameters - processing time, accuracy and length of output video and achieved an average processing time of $1/24^{th}$ the video length for surveillance videos

WORK EXPERIENCE

Jefferies LLC, New York City　　　May 2017 – September 2017

Software Developer Intern

- Created an end-to-end project for statistically predicting alpha (information retrieved from a client)
- Developed an application to periodically download files from a SFTP host, pre-process it in R and load it to the database. Also, worked on the webservice to compute the risk of a portfolio based on the pre-processed values
- Initiated the development of a reusable Java-based utility to enhance the FTP downloads. Also, optimized the performance on bulk inserts using SSIS package from 12 minutes for 3.6 million rows to just 2 seconds.

CPConverge, Mumbai　　　July 2015 – June 2016

Software Developer

- Developed an application (www.cpconverge.com) to focus on analytics of empirical data of students, which saw 600 enrollments with 82% positive feedback with-in one year
- Headed a 3-member team to develop an Adaptive Test (www.collegepond.com/free_gre_mock_test/) and also formulated 450 Quantitative Aptitude questions for the Aptitude test

SKILLS

Languages: Java, Python, C#, R, C++, PHP, R, MATLAB, C,
Web Technologies and Frameworks: HTML5, CSS3, JavaScript, JQuery, AngularJS, AJAX, .NET
Data Stores: SQL Server, MySQL, PostgreSQL
AWS: Beanstalk, DynamoDB, ElasticSearch, SQS, SNS

AWARDS AND OTHER POSITIONS

1st Prize in intra-college Technical paper presentation on Big Data Analytics, *September 2013*

Founder of a non-profit organization "*Agli-Mumbai*", *October 2013*

Cleared KVS Regional Mathematical Olympiad, *October 2009*