Vivek Shah

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SUMMARY OF QUALIFICATIONS

- Achieved 10/10 GPA in the final semester for my Thesis Project in Bachelor of Computer Science.
- Previous internship experience at 3 startups working as a Software Engineer.
- Knowledge of various languages and programs used in research and experiment implementation.

EDUCATION

George Mason University Expected May 2017
M.S. in Computer Science

- Relevant Coursework: Systems Programming, Mathematics for CS

Vellore Institute of Technology July 2011 - May 2015
B.Tech. in Computer Science and Engineering

- GPA: 8.13/10
- Relevant Coursework: Software Engineering, Data Structures and Algorithms, Analysis of Algorithms, Operating Systems, Introduction to A.I, Data Mining

TECHNICAL SKILLS

Programming Languages	Python, C, C++, JAVA, R, Ruby, PHP, HTML, CSS, Javascript
Tools	Solr, LATEX, MATLAB, Git
Databases	MySQL, MongoDB, PostgreSQL

EXPERIENCE

Graduate Research Assistant Oct 2015 - Present
George Mason University Fairfax, VA

- Designing and implementing a hierarchical database in SQL of the digital archive of manuscripts for American Sociological Association (ASA).
- Cleaning Journal Builder files and integrating the data into the database.

Software Engineering Intern May 2015 - July 2015
TinyOwl Mumbai, India

- Determined the perfect coupon for every user by performing clustering and data mining over the user data.
- Designed and generated a new scoring algorithm to determine the worthiness of the user.

Software Engineering Intern Jan 2015 - Feb 2015
Birds Eye Systems Mumbai, India

- Designing and implementing a multi-node cluster on Hadoop with its integration in R programming language.
- Improved the existing predictive modelling technique and achieve an increase in success rate by 10 percent.

Software Engineering Intern June 2014 - July 2014
Dataweave Bangalore, India

- Automated the systems by performing clustering over various e-commerce attributes.
- Added multiple input support in real time to the Brand Tagging API to reduce systems workload by 60 percent.

MAJOR PROJECTS

Portable Leaf Identification System Jan 2015 - May 2015

- Extraction of leaf's geometric features such as Aspect Ratio, Convex Area ratio, Form factor, Diameter, Solidity, Circularity, Irregularity, etc from an image.
- Leaf classification using a multi-SVM (Support Vector Machine) based on their geometrical shape features.
- Using textural features of leaves for disease detection and estimating its oxygen and nitrogen content.

A Refined Rough Fuzzy Clustering Algorithm Aug 2014- Nov 2014

- Improving the time complexity of the algorithm to O (n log n).
- Used the algorithm on Brain MRI images which resulted in highlighting all unique features of the image.
- Published a paper based on the research conducted and won the best paper award at the conference.

MIT SANA Mobile: Protocol Builder Feb 2014 - May 2014

- Built a database that contain options for rapid search, review and a training set for A.I. classification of images, audio and video.
- Built a web application for creating a diagnosis chart by doctors using JsPlumb for helping people to easily diagnose themselves in remote areas without medical facility.

Blood Bank Management System Feb 2014 - Apr 2014

- Created a service for blood donors to register and blood recipient to connect with them.
- A PHP search module for the recipient to search for the nearest donor available.

PERSONAL PROJECTS

Send Scores via SMS: Web Scrapping of data and send scores via Way2SMS platform. Python was used to develop the application

HackerRank Algorithm Challenges: Ranked 492 out of over 100,000 programmers on HackerRank with a 92 percentile.

File explorer: Designed a file explorer using JAVA Swing with options to create new folders and files and also cut,copy, paste and delete.

PUBLICATIONS

- Shah, V.,Sobti, S., Tripathy, B., (2014). A Refined Rough Fuzzy Clustering Algorithm.*IEEE International Conference on Computational Intelligence and Computing Research, 1-5*