Vijesh M

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Technical Skills

Operating Systems	Linux – Ubuntu Windows – Windows XP, Windows Vista, Windows 7
Programming Languages	C, C++, Python, Java
Databases	Basics of MySQL and MongoDB
Web Technologies	HTML, CSS, JavaScript, PHP
Development Environments	GEdit, Eclipse, Code Blocks, Netbeans, ViM, Notepad++, JGrasp, iPython
Graphics Design	Adobe Photoshop CS6, Sony Vegas Pro 10
Document Markup	LaTeX

Projects and Internships

Google Summer of Code – 2013
Tags: Gephi, Legend Module, Java
I've been selected for GSoC for the project "Completing Legend Module" under Gephi Consortium. The project deals with creating APIs for the Legend Module that enables developers to create plugins. The project also involves creating a handful of potentially useful plugins. The users of Gephi can then use these plugins to annotate the rendered Graph.

Approximate All Pair Shortest Path in a Network
Tags: navigation algorithm, human navigation, complex networks, graph theory and algorithms, reinforcement learning
I completed the research project on Complex Networks during the Internship Program at ISI, Chennai and CSE Dept, IIT Madras. This novel algorithm accomplishes the task of way-finding from a source to a destination in an unknown environment. The implementation involved the usage of python libraries such as networkx, matplotlib etc and the basic ideas from reinforcement learning.

Predicting the Order of Arrival of Nodes in a Scale Free Network
Tags: scale free networks, probabilistic prediction, Differential Core Centrality
The development of the algorithm was carried out as a part of the research project on Complex Networks during the Internship Program at ISI, Chennai and CSE Dept, IIT Madras. This novel algorithm aims at predicting the order of arrival of nodes in a scale free network. The implementation involved the usage of python libraries such as networkx, matplotlib etc.

A Generic Recommendation Algorithm
Tags: item similarity based graph, dimensionality reduction, generic, adaptive weight distribution
This project was carried out as my final year project, under the guidance of Dr. Kavi Mahesh. This generic model of a recommendation algorithm is adaptive in nature. It uses graphs to describe relations between various items. The approach can be morphed into a dimensionality reduction technique, a rating prediction system and a link prediction technique for social networks. It was implemented using Qt in the frontend and python at the backend.

Parallel Search Algorithm in Power Law Networks
Tags: navigation algorithm, complex networks, graph theory and algorithms, greedy algorithm
The development of this algorithm was carried out as a part of 6th sem special topic, under the guidance of Dr. Kavi Mahesh. This novel algorithm is aimed at establishing a path between a source and a destination, using a greedy traversal technique. The logic dictates that the algorithm can also be parallelized. It was implemented using python networkx, matplotlib etc.

EezyReport
Tags: report generation, pdflatex, xml, python
This is a tool that was developed to generate reports, specifically for final year projects. It is aimed at reducing the overhead on students and project guides by eradicating the formatting inconsistencies across project reports. It was implemented using python, pdflatex and xml technologies.

Local Trends in Twitter
Tags: Twitter, oAuth, synonym-based ranking
An individual would be more interested in the happenings in his/her immediate neighborhood, in contrast with the relatively global happenings. This hack deduces a local trend for a given twitter handle by analyzing the tweets of his/her followees.

Boredom Detection
Tags: quantization of boredom level, difference method, noise computation
This project aims at quantizing the level of boredom during a lecture. It utilizes the images captured during the lecture and quantizes the boredom level by computing the amount of disturbance during the lecture. The project was carried out under Dr. Sudarshan Iyengar at IISc, Bengaluru.

Research and Publications

- "A Navigation Algorithm Inspired by Human Navigation" [http://arxiv.org/abs/1111.4898], has been accepted as a **Workshop Paper** in **ASONAM 2012** - The IEEE/ACM International Conference on Social Networks Analysis and Mining, to be held from August 26-29th 2012 in Istanbul, Turkey.
- "Prediction Of Arrival Of Nodes In A Scale Free Network" [http://arxiv.org/abs/1111.4886], has been accepted as a **Short Paper** in **ASONAM 2012** - The IEEE/ACM International Conference on Social Networks Analysis and Mining, to be held from August 26-29th 2012 in Istanbul, Turkey.

Areas of Interest

- Machine Learning and Information Retrieval
- Computer Vision and Image Processing
- Graph Theory, Linear Algebra and Social Networks

Educational Qualification

SSLC	Vijaya High School	96%	2007
2nd PUC	Vijaya Composite PU College	95% CET Rank: 576	2009
BE, Computer Science and Engineering	PES Institute of Technology	9.00 CGPA	2009 - 13

Academic Honors

- Academic Excellence Award from Vijaya Composite PU College in 2009
- Two Scholarships from Divya Jyothi Society, Bangalore
- Central Sector Scholarship for BE during 2009-2013
- Distinction Awards in BE for all the eight semesters.

Accomplishments

- I've delivered a talk on Graph Navigation Techniques at **IIT-Chennai** during July 2011.
- I've been certified as a '**Cognizant Certified Student**' for passing the test conducted by Cognizant in the year 2011.
- I've conducted four Adobe Photoshop workshops in college, including the one from IEEE Student Community.
- I've conducted numerous Photography tutorial classes as a part of Extended Weekday Activities in college.
- I was a part of the organizing team of **Ayana-12** and **Ayana-13**, a 24-hour hackathon event.
- I handled the photography for our college fest, **Aatmatrisha-11**, **Aatmatrisha-12** and **Aatmatrisha-13**.
- I was a part of '**Eclat**' design team during the year 2010.

Personal Profile

Father's Name	S S Mohan
Mother's Name	K P Nagarathna
Date of Birth	8th May 1991
Address	#4, Block No. 9, KHB Colony, Lalbagh Siddapura, Bangalore – 560011
Languages Known	English, Hindi and Kannada
LinkedIn Profile	http://www.linkedin.com/pub/vijesh-m/48/683/780
Github Profile	http://github.com/vijeshm

I declare that the above information is true and correct to the best of my knowledge and belief.

Bangalore Vijesh M