FREEZE FRANCIS LinkedIn

Objective

Seeking a challenging career to enrich and apply my technical skills to further company growth.

Contact Information

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Work Experience

CenturyLink Tech. Pvt. Ltd, Bangalore   **AUG,2014 – JUN,2015**
Software Development Engineer   **Technology: JAVA/J2EE**
- Developed web applications for generating sales order XML for easy testing.

Teaching Assistant at IIIT, Bangalore   **JUL,2016 – AUG,2016**
- Teaching assistantship for Java Programming course for Mtech,2016 Batch

Professional Skills

Languages: Core Java, C/C++, Python3, MATLAB, JavaEE, XML
Operating System: Ubuntu 14.04, Windows 7
ML libraries :   Scikit-learn, GraphLab, Tensorflow
Graphics API: OpenGL, GLUT
Frameworks: Struts 2.0, Hibernate
J2EE servers: Apache Tomcat, WebLogic
Source Control: CVS, Serena Dimensions, Git
Databases: Oracle, MySQL
Softwares: Eclipse IDE, Keil, SQL-Plus, Doxygen, Latex, Ipython Notebook.
Hardware: Atmega 8/16/32 Microcontroller, 8051.

Areas of Interest

Data Structures, Algorithms, Mathematics, Machine Learning, Computer Graphics

Education

Course	Year Of Passing	Marks Obtained	Institute
M.Tech IT (CS)	2017	3.87/4	IIIT, Bangalore
B.Tech ECE	2014	8.73/10	NIT, Calicut
12th CBSE	2010	95.4%	Devamatha CMI Public School
10th CBSE	2008	96%	Devamatha CMI Public School

Projects Completed

Academic Projects

Estimation of High Resolution image from set of Low resolution images.
Team size: 4   **Language**: MATLAB
- Implemented algorithm for estimating shift parameters between images for image registration.
- Implemented POCS(Projection Onto Convex Sets) based image reconstruction method.
- Designed a simple UI.

Basic Clustering Based Movie Recommender System
Team size: 1   **Language/Libraries**: Python/Scikit-learn   **Source**: MovieRecommender
- Clustered movie based on genres and computed cluster average ratings per user.
- Computed user-user similarity using Pearson correlation coefficient.

- •Predicted reviews per user based on top similar users.
- •Mean Squared Error of 1.23 achieved on MovieLens 100K dataset.
- •Attempted matrix factorization approach.

FPGA implementation of CORDIC algorithm(UG Major Project)
Team size: 4   **Language**: MATLAB/VHDL
- •**CO**rdinate **R**otation **DI**gital **C**omputer: Efficient method of computing trigonometric values based on cordinate rotation involving simple shift add operations.
- •Reduced the complex multiplications to simple shift and add operation.
- •Developed a pipelined CORDIC core that computes trigonometric values efficiently.

Scene Graph Implementation
Team size: 1   **Language**: C/C++   **API:** OpenGL/GLUT   **Source**: SceneGraphs
- • Scene graph: Tree data structure storing the logical and spatial representation of scene.
- • Implemented scene graph.
- • Designed a animated scene adhering to MVC architecture.

Professional Projects:

Customer Order Document(COD) Generator (CenturyLink Tech.).
Team size: 3   **Language**: Java/J2EE,HTML/CSS/JSP, JavaScript   **Server:** WebLogic
Framework: Struts 2.0,Hibernate
- •An automated testing tool for generating sales order XMLs.
- •Designed configurable UI for displaying relevant fields in template XMLs.
- •Exploited the structure of sales order XML to support for different product.
- •Extended functionalities to populate concerned DB tables to initiate a order provisioning workflow.

Mini Projects:

Naive Spell Checker:
Team size: 1   **Language**: Java   **Source**: SpellChecker
- •Constructed word-frequency map from corpus.
- •Generated all words of edit distances one and two from misspelled word and corrected to the most frequent word with least edit distance.

Certified Online Courses
- • Machine Learning: Classification by University of Washington, Coursera.
- • Text Retrieval and Search Engines by University of Illinois at Urbana-Champaign, Coursera.

Achievements
- • Part of the Dean's Merit List,2016 IIITB for outstanding academic performance.
- • Qualified GATE ECE-2014 with AIR-567.
- • Qualified NSEC − 2009(National Standard Exam in Chemistry) and appeared for INChO (Indian National Chemistry Olympiad), 2010.
- • Qualified IIT-JEE,2010 with AIR-5308 and Kerala Entrance,2010 with Rank-72.
- • School Topper in both 10th and 12th board exams.
- • Amul Vidya Shree award for outstanding performance in 10th board exam.
- • Won 2nd in 800m race and 3rd in 4 x 100m relay in All Kerala CMI CBSE Sports meet,2008-2009.
- • State Rank 66 in 7th National Cyber Olympiad,2007

Activities
- • Conducted AVR micro-controller programming workshop as part of IEEE, NITC.
- • Organized Electronics Stall for Tathva,2012 (Tech fest at NITC).

Declaration
I hereby declare that the above details are true to the best of my knowledge and belief.