# **G K Sudharshan** | CS13M050

# **Indian Institute of Technology Madras**

219, Narmada, IIT Madras



# **Objective**

To be a part of an organization where the process of learning never ends and imagination takes its wings to unexplored skies and hard workers are always promoted.

#### Education

Program	Institution	%/CGPA	Year of completion
Master of Technology, Computer Science and Engineering	Indian Institute of Technology, Madras	9.4	2015
Bachelor of Engineering, Computer Engineering	MES College Of Engineering Pune	75.8%	2011
XIIth Std. (CBSE),	Kendriya Vidyalaya, Ganeshkhind,Pune	90.2%	2007
Xth Std. (CBSE)	Kendriya Vidyalaya, Ganeshkhind,Pune	83.8%	2005

### **Scholastic Achievements**

- Won Second Prize for Code Red Contest in Solutions'10 organized by Army Institute of Technology, Pune.
- $\circ$  Participated and won Second prize for C/C++ and paper presentation Contest in Zest'08 conducted by the Association Of Computer Engineers (A.C.E.)
- Secured college-first in F.Y. engineering

#### **Course Work**

1. Core Courses August 2013-Nov 2013

IIT Madras

Mathematical Concepts in CS

Advanced Data Structures and Algorithms

2. Elective Courses August 2013-April 2014

IIT Madras

Pattern Recognition

Data Mining

Speech Technology

Kernel Methods for Pattern Analysis

# **Course Projects**

## 1. Spotting of optimal business location

January - April 2014

https://github.com/sudhargk/datamining

IIT Madras

A machine learning solution using the location based social networking data to identify the best location among the different locations suggested.

HIGHLIGHTS: Implemented multiple regression techniques and achieved 81 % accuracy on cross-validation.

#### 2. A parallel implementation of discrete Hidden Markov Model

January - April 2014

https://github.com/sudhargk/parallelhmm

IIT Madras

Implementation of two main aspects of HMM training which are forward evaluation and vitterbi alignment algorithm using Pthreads. Highlights: Attained 2x speed up using four threads on a long input sequences.

# **Working Experience**

#### 1. Connector Development

Feb 2014 - Jul 2014

Senior Software Engineer

Persistent System Private Limited, Pune

Scope: Build connectors for different platform (CRM, ERP and Social platforms) and generate BI reports after data scraping. Personal Contributions: Designed and built a generic parsing module to parse responses (XML, JSON, CSV) and generate relational data in a streaming manner helping client in agile development of connectors.

#### 2. Contact Center Analytics

Apr 2013 - Jan 2014

Software Engineer

Persistent System Private Limited, Pune

Scope: Predict the call volume in contact center which in turn help staffing of contact center workers.

PERSONAL CONTRIBUTIONS: Solved ad-hoc analytical queries on contact centre data and built regression model to predict call volumes.

#### 3. Ticket breach prediction

Sep 2012 - Mar 2013

Software Engineer

Persistent System Private Limited, Pune

SCOPE: Build a tool to help the call center dispatchers in understanding whether a ticket created by the customers would breach the SLA or not.

 $\label{eq:personal_contribution} Personal \ Contribution: \ Implemented \ new \ features \ like \ internationalization \ of \ all \ texts \ in \ the \ tool \ and \ exporting \ predictions \ results \ to \ excel. \ Also \ developed \ code \ in \ java \ for \ testing \ data \ from \ PMML, \ removing \ the \ dependency \ on \ expensive \ toolkit.$ 

# **Key Projects**

#### 1. Deep Neural Net Toolbox

Ongoing

https://github.com/iitm-donlab/python-dnn

IIT, Madras

A python tool kit for implementation of state of art algorithms for fields like computer vision, automatic speech recognition.

HIGHLIGHTS: Achieved state of art results on the MNIST dataset provides easy configuration for new dataset

2. Sharespot

May 2011

https://github.com/sudhargk/sharespot

MES College Of Engineering, Pune

An android application that integrates different sharing sites (Flickr, YouTube and Picasa) into a single mobile application.

HIGHLIGHTS: Allows configuration of multiple account, caching of media and parallel browsing.

#### 3. Online Dead Stock Register

May 2009

https://github.com/sudhargk/dead-stock-register

MES College Of Engineering, Pune

A management system that replaces the conventional bulky registers to hold the records of the dead stock of any institution. Highlights: Authorization based on profile of the logged in user. Supports automatic and manual resolution of dead stock numbering.

## **Skills and Tools**

- Programming Languages C/C++, Java, Python, SQL, Shell scripting
- Operating Systems Linux, Windows
- Applications and Tools MySQI, vi Editor
- o Machine learning Tools Matlab, libSVM, Weka

#### Interested in

- Listening to Music
- Playing Cricket, Table Tennis
- Reading books

#### **Declaration**

I hereby declare that all the information given above is true to the best of my knowledge as on September 17, 2014.