

AKSHAY KAPLESH

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EDUCATIONAL QUALIFICATION

Year	Degree	Institution	GPA/%	
2012-2017	B.Tech - M.Tech Dual Degree: Civil Engineering	IIT Kanpur	UG 8.4/10.0	PG 8.3/10.0
2012	XII: CBSE	D.A.V Public School, Himachal Pradesh	85 %	
2010	X: CBSE	D.A.V Public School, Himachal Pradesh	9.0/10.0	

INDUSTRIAL EXPERIENCE

PROGRAMMER ANALYST, QUANTUM PHINANCE CONSULTING, MUMBAI INDIA

July'17 – Present

- Developed and implemented process **automation framework** to automate business operation processes
- Worked on software architect of a comprehensive corporate **Asset, Liability, Derivatives Management** software that involves maintaining, analysing, optimizing and accounting for the non-banking financial firms
- Involved with client specific project scoping and implementation, overall optimization and new features building for the solutions

KEY ACADEMICS PROJECTS

MCMC Algorithms

Jan'17 – Apr'17

- Programmed model applications of **Markov Chain Monte Carlo** techniques for different illustrations
- Investigated different models like Bayesian stochastic model, Bayesian linear regression, and binomial model from MCMC perspective

Multi Objective Optimization using Genetic Algorithms

Jan'16 – Apr'16

- Solved 0\1 **Multiple knapsack** problem, which is an **NP-hard** real world problem, using Simple Evolutionary Algorithm
- Implemented algorithms like MOEA-D and NSGA-II/DE on various standard problems and **concluded** that **MOEA-D performs better**

Customer Churn Prediction

May'16 – Jul'16

- Predicted number of customers** who are going to defect (churn) to another cellular network provider company
- Implemented techniques like Ensemble Method, Neural Networks, Decision Tree, Random Forest and SVM on dataset of over **70000** records

Statistical Analysis of Data and Anomaly Detection

Jan'15 – Apr'15

- Fitted multi-normal distribution on a large dataset containing **25000** records of heights and weights for **hypothesis testing**
- Computed **goodness of fit** using various test statistics and removed **anomalies** and misspelled data from the dataset

Unsupervised Classification: Assessing Algorithms

Jan'15 – Apr'15

- Identified an **effective clustering technique** for a given data set of image which contains more than **1000** bands
- Evaluated various algorithms out of which Fuzzy C means worked out **best** in terms of time complexity and image homogeneity

MASTER'S THESIS

Feature Based Learning for Fusion of Remote Sensing Images

May'16 – June'17

- Developed models for information retrieval in snow covered areas using **machine learning** algorithms
- Implemented models using different algorithms like **neural networks, dictionary learning** were compared over different satellite dataset
- Contributed to the **central government project** for modelling of snow hydrological potential using satellite dataset

INTEREST/TECHNICAL SKILLS

- Programming Languages:** C, C++, C#, Python
- Other Tools:** MATLAB, Wolfram Mathematica, R, LATEX, AutoCAD, Arc GIS, Quantum GIS, ILWIS

INTERNSHIP

SOFTWARE ENGINEER, SOFTECH ENGINEER PVT. LTD, PUNE, INDIA

May'15 – Jul'15

- Discovered **land corruption** in Pune area by integrating different layers of spatial and attribute data as provided by Pune Municipal Corp.
- Reclassified data for compatible use with **database** which was further projected over the web map for better **visual** comprehensibility
- Impact:** Developed model formed a **ground work** in this area that was **used** in governmental public works and procurement management

RELEVANT COURSES

- Convex optimization
- Stochastic Process
- Statistical Simulation and Data Analysis
- Neural networks
- Data Mining
- C Programming
- Probability and Statistics
- Microeconomics

SCHOLASTIC ACHIEVEMENTS

- Recipient of the **Donor's Scholarship** for being amongst the **top 1% performers** in academics
- Ranked in Top-10 among 105 students in the Department for B.Tech
- Ranked in **Top 1%** (amongst 0.5 million students) in IIT-JEE 2012 and **Top 0.1%** (amongst 1.25 million students) in AIEEE 2012

POSITION OF RESPONSIBILITY

OVERALL COORDINATOR, SOCIETY OF CIVIL ENGINEERS, IIT KANPUR

Jul'14 – May'15

Leadership and Management	<ul style="list-style-type: none">Led a team of 30 individuals to organise seminars, technical discussions and industrial tripsOrganized departmental farewell for a batch of 200 students, efficiently managing a budget of 55000 INROrganized a 2 day industrial trip for 50 students to N.M. Roof Designers Ltd, Jaipur<ul style="list-style-type: none">Successfully procured and managed a total sum of 100000 INR as a part of trip expenses
Initiatives	<ul style="list-style-type: none">Invited Director (Works) of IRCON to deliver a lecture on Pir Panjal Railway Tunnel located in J&KRe-started Civil Dept. magazine, took interviews of professors, industry experts & collected write-ups
Impact	<ul style="list-style-type: none">Restored SOCE's equity from 0 to 40000 by improving funding routes and cutting down on costsConvinced industry experts as well as professors to deliver talks on industry practices in Civil Engineering