Chalam V.S. Pusuluri

Phone : +91 8876369233
Email : chalam.pusuluri@gmail.com

Silver Oaks Apartments 122/51
Gurgaon, Haryana, India - 122002

Academic Credentials

Degree	Institute	CGPA %	Years
Bachelor of Technology	Indian Institute of Technology Guwahati	8.6/10	2011-2015
Higher Secondary (CBSE)	BHPV Senior Secondary School	91.2%	Mar'2011
Matriculation (ICSE)	St. Aloysius Anglo Indian High School	88.9%	Mar'2009

Experience

Business Analyst at Snapdeal *July'15 - present*

Project : Popularity Ranking of Products *Oct'15 – Mar'16*

- ***Task:*** Efficiently rank products in category listing pages using popularity score.
- ***Goals:*** Improve business metrics – conversion, revenue-per-visit and click-through rate.
- ***Tools/Techniques used:*** Optimization – Simulated Annealing, Genetic Algorithms, R, Python, SQL and Shell Scripting.
- ***Troubleshooting skills:*** Single-handedly formulated the problem statement, performed feature selection, developed the model, performed the impact analysis and optimized the code to bring down the computational time without much compromise on accuracy in order to scale-up the model and automate the process.
- ***Outcome:*** Boosted the metrics – conversion by 71%, revenue-per-visit by 63% and click-through-rate by 11% on the test group.
- ***Accolades:*** Model far exceeded the expectations and taken into production across the company's catalogue in all the three platforms – WEB, WAP and APP.

Project : A/B Testing *Apr – Sep'16*

- ***Task:*** Statistically analyze experiment results of A/B testing.
- ***Goals:*** Re-define A/B testing framework to eliminate unintended external influences leading to incorrect conclusions in search space.
- ***Tools/Techniques used:*** Frequentist Inferential Statistics, HIVE, Python.
- ***Troubleshooting skills:*** Collaborated with the Business Intelligence, Data Warehouse, Technology, Product and US-based Data Science teams to ensure smooth workflow of the process and meet individual requirements.
- ***Outcome:*** Robust framework for running A/B tests and dashboard for automated analysis of the results incorporating statistical significance levels.
- ***Accolades:*** The dashboard is used rigorously in search domain by the top management for arriving at precise conclusions on experiments and the framework is benchmarked for usage in experiments by Ads team, UI team and beyond.

Project : Product Quality Index (PQI) *Oct'16 Onwards*

- ***Task:*** Quantifying the quality of products based on user ratings.
- ***Goals:*** Show quality products to users to improve conversion and reduce product returns.
- ***Tools/Techniques used*** *(till date)*: Simple Average Ratings, Credible Interval based Ratings, Laplace Smoothened Average Ratings, Bayes Mean Ratings, Dirichlet Mean Ratings, Python, Matplotlib,

Scipy.stats, Numpy, Pandas, Scikit-learn.

- ***Troubleshooting skills:*** Researched and assimilated the applicable concepts of advanced Bayesian approaches to the project in a relatively short span of time.
- Advanced machine learning concepts are being incorporated and the project is currently *ongoing*.

Projects

Data Science Project : Field Operation Optimization (AnalytixLabs) *Mar – Apr'16*

Guide : Mr. Chandra Mouli, Chief Data Scientist at AnalytixLabs

- ***Task:*** Maximize accomplished jobs and minimize resources' travel time.
- ***Goal:*** Optimally allocate the resources with variable skill sets to accomplish the set jobs which require different skills, subject to time constraints both at resources shift availability and duration for job completion.
- ***Tools/Techniques used:*** Binary-coded Genetic Algorithm, Dynamic Programming, R, Python.
- ***Troubleshooting skills:*** Efficient time management for intensive research and rigorous literature review on the applicable algorithms for the technically demanding project without compromise on a healthy performance in job at *Snapdeal*, as the project was largely driven out of self-interest and thirst for knowledge.
- ***Outcome/Achievement:*** Familiarized with the amalgamation of genetic algorithms with the advanced optimization method of dynamic programming and realized its practical applicability in solving complex problems.

Bachelor Thesis Project : Isogeometric Topology Optimization (IIT G) *Aug'14-Apr'15*

Guide : Asst Prof. Deepak Sharma

- ***Task:*** Minimize the mean compliance of domains by weight reductions.
- ***Goal:*** Optimize the topology for 2D domains using Isogeometric Analysis (IGA).
- ***Tools/Techniques used:*** Optimization, Solid Isotropic Material with Penalization (SIMP) method, Isogeometric Analysis (IGA), Finite Element Method (FEM), Spline, Non-uniform rational B-spline, C.
- ***Troubleshooting:*** Managed time to research, learn and experiment on a relatively new and technically sound concept of IGA without compromising on demanding managerial responsibilities related to placements undertaken during the time.
- ***Outcome:*** Optimized the topology for a bent cantilever beam and an Infinite plate with a hole with 50% weight reduction in each.
- ***Accolades:*** The carried out research evolved as a manuscript for submission to an international journal of repute.

Evolutionary Computation Course Project : Capacitated Warehouse Location (IIT G) *Feb-Apr'15*

Guide : Asst Prof. Deepak Sharma

- ***Task:*** Perform binary level optimization - locate warehouses using Genetic Algorithm at top level and distribute resources using Simplex method at bottom level.
- ***Goal:*** Maximize the profit by reducing the associated fixed warehouse rental costs and variable transportation costs for milk distribution system of *Amul*, India's largest dairy cooperative, in an Indian metro and capital city of *New Delhi*.
- ***Tools/Techniques used:*** Optimization - Binary-coded Genetic Algorithm, Simplex method, C++
- ***Troubleshooting skills:*** Rigorous research on the available techniques on warehouse location optimization.
- ***Outcome/Achievement:*** Practical hands-on experience on the implementation of genetic algorithms on real world data which enlightened to realize its strengths and limitations over conventional optimization algorithms.

Indian Institute of Management, Ahmedabad (IIM A) *May'13-Jul'13*

Internship Project : Future Group and Tata Teleservices, A Case of Cross-Market Discount

Guide : Asst Prof. Sachin Jayaswal

- ***Task:*** Build a Game Theoretical Model to evaluate the strengths and limitations of Cross-Market Discount.
- ***Goal:*** Comparative study of Cross-Market discount with similar promotional strategies – product bundling, complimentary pricing, loss leadership on *T24* – a joint venture between *Tata Teleservices* and *Future Group*, an Indian private conglomerate.
- ***Tools /Techniques used:*** Optimization, Game theory, Mathematica.
- ***Troubleshooting skills:*** Learnt new software – Mathematica, assimilated marketing concepts and applied game theory by undergoing rigorous literature survey in a short span of time.
- ***Outcome:*** Cross market discount was analyzed to perform better and simultaneously improve product price and consumption quantity based on degree of competition in the market.
- ***Accolades:*** The literature report is used as assisting material for case studying purposes at the institute.

Relevant Courses

IIT Guwahati	Optimization Techniques, Evolutionary Computation, Computational Fluid Dynamics, Introduction to Computing
AnalytixLabs	Advanced Big Data Science
Coursera	Machine Learning Foundations: A Case Study Approach, Machine Learning: Regression, Machine Learning: Classification, Machine Learning: Clustering and Retrieval, Bayesian Statistics, Linear Regression and Modelling, Inferential Statistics, Introduction to Big Data, Hadoop Platform and Application Framework, Introduction to Big Data Analytics, Machine Learning with Big Data, Graph Analytics for Big Data, Neural Network for Machine Learning*
Udacity	A/B Testing, Deep Learning Foundation Nanodegree*

*ongoing; expected to complete by the end of September, 2017.

Proficiency

Statistical Softwares	**Languages:** R, Python, SQL, C, C++; **Tools and components:** Tensorflow, Keras, Numpy, Pandas, Matplotlib, Scipy.stats, Scikit-Learn, GraphLab, Neo4j, Mathematica, KNIME, Advanced Excel, Omniture, Jupyter Notebook, Hadoop ecosystem – HDFS, Hive, Pig, Impala and Spark
Areas	Convolutional Neural Networks, Recurrent Neural Networks, Genetic Algorithms, Optimization, Game Theory, Regression, Classification, Clustering, Recommender Systems, Dimensionality Reduction, Deep Learning, Graph Analytics, Hypothesis Testing, Data Structures and Algorithms

Accolades

- Awarded **a prestigious medal** (only 1-5% of company's work force get such award) at *Snapdeal* for high quality output at professional work during festive sales period in the months of September and October, 2016. (*Nov'2016*).

- Consistently **rated as top performer** by the management for high quality steady output at *Snapdeal* for all the four appraisal cycles that happened since the date of joining the company (*July'2015).*
- Awarded **Merit-cum-Means scholarship** for all the four years of undergraduate study at IIT G for superior academic performance (*2011-2015*).
- Secured **2nd position** in Technical writing workshop, Reflux 2.0 of IIT Guwahati (*2014*).
- Secured **2nd position** in Matlab quiz conducted during Reflux 2.0 of IIT Guwahati (*2014).*
- Awarded **Certificate of Merit** and cash award in recognition of superior performance in academic persuasion (*CBSE - 2011*).
- Received General-Proficiency awards for four consecutive years at school (*2006-2009).*

Positions of Responsibility

- **Chief Project Pilot** for *Popularity Ranking of Products* in category listing pages and responsible for successful implementation of the project across *Snapdeal's* catalogue in all the three platforms – WEB, WAP and APP. (*Oct'15 – Mar'16)*
- **Placement Secretary** of Mechanical department, Training and Placement Cell, *2014-15*
- **Chief-organizer** of events team in IES-IITG Entrepreneurship Summit, *2013.*
- **Internship Secretary** of Mechanical department, Training and Placement Cell, *2013-14*.
- **City Organizer** of Technothlon, The International School Championship of Techniche, IIT G (*2011-2012*).
- **Part time Editorial and Research Assistant,** Graduate Diploma in Science-Spirituality, Bhaktivedanta Institute, Kolkata (*2014 – till date*).

References

Dr. Deepak Sharma
Assistant Professor
Department of Mechanical Engineering
Indian Institute of Technology Guwahati
Phone: +91 361 258 2661
E-mail: dsharma@iitg.ernet.in

Mr. Chandra Mouli
Chief Data Scientist
AnalytixLabs
Phone: +91 8826587444
E-mail: chandra@analytixlabs.co.in

Dr. Ramagopal Uppaluri
Professor, Chemical Engineering Department
Indian Institute of Technology Guwahati &
Honorary Director (Distance Education)
Bhaktivedanta Institute, Kolkata
Phone: +91 361 258 2260/2981
E-mail: ramgopalu@iitg.ernet.in