Atul Anshuman Singh

Analyst - Data Scientist

📋 08 March 1993

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in /in/atulanshumansingh

Education

B.E.(Hons.) Electronics and Communication, NSIT (Delhi) | 2016 | 75.9 % (First Class with Distinction)

Class XII
Kendriya Vidyalaya | 2011 | 89.6 %

Class X
Kendriya Vidyalaya | 2009 | 90.4 %

Skills

Languages: SQL, Python, R, Matlab

Extra-Curricular

Co-Founder & Head @ Evolve
- Organized talks & workshops
- Brought the alumni of IITs, BITS, NITs and industry professionals to guide students

Graphic Designer @ Designers Anonymous & Dept. of Technical Arts
- Taught design softwares to students
- Designed content to publicize fests

Event Manager @ BITS Embryo
- Organizer of conclave forums & talks
- Handled logistics & pitched speakers

Volunteer @ NSS & Nirmaan NGO
- Created jobs for rural women
- Co-organized Cyclone relief fund-raiser, cleanliness drives & taught rural school kids

Class Committee representative & Teaching Assistant for the courses Production Techniques & Human Resource Development

Work Experience

United Airlines | Analyst - Data Scientist   Jun'19-present

- **Recommendation Engine:**
  Developed collaborative filtering based Recommendation Engine to recommend exciting destinations to UA's 14M customers
  – Built complete model pipeline and comprehensive model performance tracking tool
  – Model generated ~$ 5M avg. monthly and ~$ 60M yearly estimated revenue
  – Currently live on united.com/travelinspiration
  Tools used: SQL, Hadoop (Hive, Pig), Spotfire
- **Deep Learning Recommendation Engine POC:**
  Worked on POC to develop Deep Learning Recommendation Engine to enhance existing Recommendation System
  – Identified and implemented relevant methods such as Neural Collaborative Filtering, Neural Matrix Factorization etc.
  Tools used: AWS, Hadoop (Hive, Pig), Python, Tensorflow/Keras

United Airlines | Analyst - Enterprise Analytics   Nov'17-May'19

- **Fresh Food Forecast:**
  Developed regression model to forecast flight level demand for fresh food items
  – Built a GBM model in R to predict actual food quantity demanded
  – Deployed tracking and prediction delivery interface for the catering team
  – Model reduced food wastage by ~70% avg.
  Tools used: SAS, SQL, R, Spotfire
- **Domestic Network Performance Tracker:**
  Built an automated scorecard to track domestic network performance for Vice President, Network Planning
  – Tracker compares United's domestic network performance with rival carrier such Delta Airlines, American Airlines on parameters such as <>
  – Tracker forms an essential part of Network Planning decision process
  Tools used: SQL, Spotfire

United Airlines | Associate Analyst - Ent. Analytics   Jul'16-Oct'17

- **Seat Re-accomodation Impact Analysis:**
  Analysed the effect of seat re-accommodation on customer satisfaction
  – Carried out correlation analysis to seggregate impact of flight delays and irregular operations etc. to uncover the true impact of seat reaccomodation
  – Presented the findings to **Managing Director, Merchandising**
  – Made recommendation to enhance the re-accommodation engine and merchandising targeting
  Tools used: SAS, Spotfire
- **Technical Operations Performance Tracker:**
  Developed detailed system-wide technical operations performance scorecard for Vice President, Tech Ops and 900+ station managers across the Globe
  – Daily automated scorecard outlines station performance on critical TechOps parameters such as A14, D0, STAR Delays etc.
  – Report forms essential part of the leadership decision making process
  Tools used: SQL, Spotfire

Independent Projects

Encoder-Decoder based Neural Machine Translation with Attention [Github]

VGG-19 based Neural Style Transfer [Github]

Text classification using BERT fine tuning for Google QUEST QA Kaggle Competition [Github]

[Complete list of projects]

Publications

Singh, A.A. et. al, 2015. Design of digital differentiators using interior search algorithm. Procedia Computer Science, 57, pp.368-376.

[Complete list of publications]