Mohit Mayank

Data Scientist - Tata Consultancy Services

- 4+ years of industrial experience in wide domains of Business Analytics.
- Leading Data Science team to create accurate models and efficient algorithms.
- AI/ML researcher with work on cutting edge Deep Learning research.
- Winner of TCS SUPERCoder 2019 a TCS wide coding competition.
- Technology content writer over at Medium and my website ☺

WORK EXPERIENCE

Data Scientist

Tata Research Development and Design Centre, TCS

2016 - Present

Pune, India

Projects: Digitate and Intelligent Services Network

Natural Language Processing (NLP)

- Question-Answer chatbot; virtual assistant for project's flagship solution which increased daily impressions by 10% and reduced human intervention by 40%
- Issue extraction; identify different types of system alerts from IT ticket's descriptions for descriptive analysis of enterprise
- Resolution notes mining; mine L1/L2/L3's alert resolution notes to generate rules for automatable frequently occurring errors

Computer Vision (CV)

- Business Card Reader; OCR engine to extract entities from multi-lingual business cards for ultra-fast personnel contact onboarding
- Math formula identification; extract handwritten math expressions from documents for fast digitalization and education purposes

Forecasting

- Marathon prediction; create real-time model to predict NY marathon runner's race completion time with over 80% accuracy
- Enterprise revenue prediction; revenue forecasting of company's hierarchical business units with ~91% accuracy

Ontimization

- System expert analysis; find best L1/L2/L3 resolver for an error by performing multiple objective optimization, leading to reduction of overall MTTR by 15%
- Personalized pricing model; find optimal Batch analytics pricing by minimizing jobs in analysis with minimum adverse effect on SLA prediction accuracy

Causality Analysis

- Root-Cause analysis; incident management on structural graph of the enterprise to identify correct root cause for a system level event.
- What-If analysis; model causality graph of an enterprise to perform intervention on behavior of services and ask counterfactual business analysis questions

Recommendation System

 Enterprise Sales; hybrid recommendation system to generate B2B suggestions for company's Sales team with major focus on accuracy and explainability

Research Intern

Centre for Development in Advanced Computing 2015

Speech Recognition

Design and developed IoT Speech Recognition engine in Indian languages and deployed it on low-power hardware as a low-cost solution for the rural population.

PUBLICATIONS / ARTICLES

- [P] Intrinsic analysis for dual word embedding space models (NIAI 2021)
- [A] Introduction to Linear programming with Python (34k reads, 227 claps)
- [A] Building chatbot with Rasa (28k reads, 802 claps)
- [A] Introduction to Genetic Algorithm (8.5k reads, 300 likes)
- [A] Reinforcement Learning with Multi-Arm bandit (5.8k reads, 100 claps)



EDUCATION

Bachelor of Engineering (B.E.), **Electronics and Telecommunication**

Savitribai Phule Pune University (formally Pune University) 2012-2016

COURSES

- Andrew Ng's Machine Learning (Coursera)
- Intro to Artificial Intelligence (Udacity)
- Deep Learning: Advanced Computer Vision (Udemy)
- Deep Reinforcement Learning (UC Berkeley)
- Statistical Learning (Stanford Online)
- Probabilistic Graphical Models (Stanford Online)

ACHIEVEMENTS

Rank 1 – TCS SUPERCoder 2019

Beat >20k associates to win the prestigious TCS wide competitive coding competition

Winner – Digitate Ideathon 2019

Topic: Log analyzer - Detect events, find anomalies and perform root cause analysis

Runner up - Digitate Ideathon 2018

Topic: Interactive KG learning interface – asks relevant questions to build knowledge graphs

"On the spot award"

For <u>excellence in quick solution proposal</u> and <u>fast</u> deployment

"Star team award"

"Special Initiative award"

Displaying out-of-the-box thinking

SKILLS

Pune, India

AI/ML/Data Science Python/R Algorithms

Tensorflow/Keras/PyTorch

Spark/Databricks

Azure / Google Cloud