Swarup Sahoo

https://www.linkedin.com/in/swarup-utexas
https://github.com/scirop

San Antonio, TX

(302)339-3159 | swarupsahoo@icloud.com

Skills

- Machine Learning: Python - (Tensorflow, PyTorch, Keras, scikit-learn), KNIME
- Big Data: Hadoop Stack - (Sqoop, PySpark), SQL, neo4j
- Statistics: Hypothesis Testing, Bayesian Analysis, Regression Analysis, ANOVA
- Operations Research: Optimization, Network Flow, Simulation
- Programming: Python, JavaScript (React-Node stack), R

Experience

Data Scientist, USAA — June 2018 – present

- Automated the device allocation process by using NLP and Random Forest technique
- Performed K-Means clustering on Knowledge Base Articles, to improve service desk efficiency
- Created a sentiment analysis model using NLP+Neural Net for internal monitoring of Skype performance
- Integrated python machine learning models with Tableau for generating live dynamic reports
- Performed Topic modeling on feedback data to identify pain points in Customer Service using Python
- Deployed a knowledge base management AI for tagging and mapping stray documents
- Setup a python library for a common gateway to all the relevant data sources for ETL to HDFS
- Developed a lightweight graph database like neo4j with a React-JS front-end
- Developed a chatbot for basic knowledge search and numeric results based on simple data aggregation

Graduate Researcher, UT MD Anderson Cancer Center — January 2018 – May 2018

- Analyzed factors affecting Cancer treatment cost using statistical methods on Python
- Built Markov-chain based machine learning models to predict patient treatment sequence and cost

Graduate Researcher, UT Dell Medical School — August 2017 – December 2017

- Conducted studies to analyze patient arrival statistics for the WorkLife IPU
- Built statistical simulation models to predict performance of the providers at the clinic
- Maximized provider utilization by optimizing flow of patients using Network Flow algorithms

Senior Engineer, Bajaj Auto — July 2014 – June 2016

- Developed purchase order monitoring dashboard using QlikView integrated to SAP
- Developed automations using VBA on Excel for daily supply monitoring and low supply triggers

Research Projects

- Conference paper - Using Simulation to Design a Worklife Integrated Practice Unit - WinterSim 2018
- Python library for generating Green's and Inverse function coefficients for Time-Series Analysis
- Machine Learning based recommender system for matching dog breeds with owner needs (www.pawfect.ai)
- Web-app to translate text between Odia (a regional language in India) and English (odia-english.herokuapp.com)
- Hadoop-Spark cluster using Raspberry-Pi nodes
- Story generator NLP application using ngram approach in Python (https://github.com/scirop/ngrams)

Education

The University of Texas at Austin — August 2016 - May 2018
Operations Research, Masters

National Institute of Technology Rourkela (India) — July 2010 - May 2014
Mechanical Engineering, Bachelors