

Sreejith Vidyadharan

Professional summary

Highly driven Data Scientist, with 3 years of experience in machine learning, data mining and cloud computing. Creative problem solver, focused on continuous improvement and optimisation with 11+ years experience in telecommunication sector. Passionate learner of anything new, with advanced programming and cloud computing proficiency.

Work history

BSNL - DATA SCIENTIST

Thiruvalla, Kerala, India

07/2018 - 09/2021

- Predicting allocation of new nodes and additional bandwidth resources connecting each nodes between transmission stations based on past data.
- Collecting bandwidth usage data from transmission CPAN nodes, and from other MPLS and mobile divisions and creating a time-series prediction for forecasting future requirements for augmenting current transmission systems with additional line cards.
- Developed machine learning models to predict customer churn and collaborated with marketing team to design targeted retention campaigns, resulting in a 15% decrease in churn rate.
- Implemented natural language processing techniques to analyse customer feedback and identified key drivers of satisfaction, leading to a 10% increase in customer satisfaction scores.
- Collected data related to inventory for spare and repaired cards for CPAN, DWDM and OTN systems to redistribute the same across divisions to ensure better protection, and hence higher availability of traffic.
- Develop data-driven presentations out of telecom data, and create comparison charts and reports based on past vs present trends.

BSNL - TELECOM NETWORK OPERATIONS ENIGINEER

Thiruvalla, Kerala, India

03/2010 - 06/2018

- Created an OS agnostic desktop GUI application in python for monitoring packet transport systems, which was adopted by Network Monitoring Centre, enabling efficient parallel monitoring of multiple systems.

✉ sreejith_v@outlook.com

☎ 07825127188

📍 18 Redgrave Street, Liverpool, Merseyside L7 0ED

in <https://www.linkedin.com/in/sreejithvidyadharan>

Websites, portfolios, profiles

- <https://sreejithvn.github.io/>

Skills

- Python (Scikit-learn, Pandas, Numpy, Matplotlib, Scipy, PyTorch, TensorFlow, Keras, Streamlit, telnetlib), Hugging-face Transformers, R, SQL, PySpark, Boto3
- Development: Git, GitHub, Linux/Unix, Mac, Windows
- Deployment: AWS, Azure, Docker
- AWS services: MLOps, Sagemaker, Glue, Athena, Redshift, EC2, ECS, S3, DynamoDB, RDS, Data Wrangler
- Methods: XGBoost, Random Forests, Decision Trees, Clustering, Optimisation, Statistical analysis, A/B testing, Natural Language Processing, Time Series, Pattern Recognition, Deep Learning, Reinforcement Learning
- Networking: L2/L3 Routing and switching, Network security and Administration, L2 VPN, MPLS-TP, SDH, CPAN, DWDM, OTN, FTTH, Wireshark, GNS3, Ethernet and SDH Analyser, OTDR
- Machine Learning, Data Analysis, Product Development, Analytical Skills, Problem Solving, Data

- Coordinating with Network Operations Centre for planning and designing new projects such as extending OTN, CPAN and 4G rollout media in BSNL.
- Implemented MPLS-TP based packet transport network in BSNL, where we carried out acceptance testing for initial rollout in our state and executed the same within 6 weeks.
- Provisioning and maintaining services via long-distance optical transmission systems such as SDH, DWDM, CPAN and OTN based on multiple vendors like Cisco, Huawei, ZTE, Tejas, UTL and FiberHome.
- Automated several manual repetitive tasks such as backing up transmission system configuration files and logging system bandwidth loads with python and bash scripts and regular cron jobs.
- Greatly appreciated by higher ups for the quick migration to packet transport systems from SDH, and for the eagerness in learning all new OAM features, by extensive research and later conducting training sessions for entire STR wing.
- Actively participated in vendor training programmes for CPAN, NG-SDH and OTN, and conducted industrial training sessions for college students, and was awarded a certificate of excellence for the same.

Projects

Zero shot classification for Long text data

Tools: Transformers, PyTorch, Pandas, Streamlit, AWS EC2, Docker

Time Series prediction for bandwidth usage of PTN systems

Tools: AWS Forecast, Python, Pandas, Boto3, AWS S3

GUI application for monitoring CPAN transmission systems

Tools: Python, PyQt, Telnetlib

Conversational AI Chatbot for People Affected by High Inflation and Increased Cost of Living

Tools: NLTK, Spacy, Gensim, Transformers

Time series energy prediction with AWS forecast

Tools: AWS Forecast, ARIMA, Prophet, Python, Pandas, boto3, AWS S3

Visualisation, Planning, Data Science, Statistics, Research, Cloud Computing, Communication Skills, Decision Making, Data Modeling, Written Communication

Education

12/2022

University of Liverpool

Liverpool

Master of Science: Data Science and

Artificial Intelligence - 80%

07/2009

Government Engineering College

Thrissur

Bachelor of Technology: Electronics and

Communication - 74%

Certifications

AWS Certified Solutions Architect

Associate - 98%

AWS Certified Developer Associate - 95%

Cisco Certified Network Associate
(CCNA)

Microsoft Certified Azure Data Scientist
Associate - 86%

Microsoft Certified Azure Developer
Associate - 86%