Senior Machine Learning Engineer Senior Machine Learning Engineer Senior Machine Learning Engineer - Northern Trust Financial Services Chicago, IL Work Experience Senior Machine Learning Engineer Northern Trust Financial Services - Chicago, IL February 2019 to Present Develop and deploy a Chatbot using various Natural Language Processing (NLP)/Deep Learning models and integrate with existing architecture.   Develop Deep learning models with different Neural Network architectures (CNN, RNN, LSTM, GANs, Auto encoders, etc) and NLP models/techniques to perform: Named Entity Recognition (NER), Natural Language Understanding (NLU) and Natural Language Generation (NLG), Document Classification, Topic Modeling for the chatbot.   Deploy and serve Machine learning models as Microservices (NLU, NLG, QGS, etc) using REST APIs in Python.   Design/Develop architecture for future releases to improve predictions using a combination of Supervised Learning and Reinforcement Learning by making effective use of customer data.   Generate Synthetic training data of consumer questions for new features based on inputs from business.   Explore other open-source tools and end-to-end dialog flow management options: RASA NLU, RASA Core Data Engineer Pioneer - Des Moines, IA April 2018 to February 2019 Develop and apply Machine learning, Predictive modeling, Data mining, Computational approaches to extract insights from large unstructured agronomic, weather and satellite imagery data sets.   Developed Deep learning models to process image data from satellites and unmanned aerial vehicles.   Developed Multivariate regression models to predict yield for corns in the US. Built yield Predictive models that account for weather variability and other factors using clustering techniques (K-Means, hierarchical clustering).   Modeled high-dimensional datasets with geospatial and/or imagery components. Data Scientist AT&T - Richardson, TX February 2017 to March 2018 Used Machine learning/Statistical tools to gain insights from unstructured customer data. Performed Text mining of call-center text data from customers' feedback using Natural Language Processing (NLP) techniques.   Developed Predictive models to gain insights from DirecTV enrollment, viewership, content and their metadata using various Machine learning techniques. Performed Sentiment analysis to determine users' satisfaction based on social media trends which was used by business to develop personalized content and to optimize advertising effectiveness

and delivery. Machine Learning Data Engineer Capital One - Plano, TX April 2016 to December 2016   Performed Customer segmentation using various Clustering algorithms.   Performed Data mining, Feature Engineering on large datasets.   Performed Dimensionality reduction of financial datasets using PCA.   Built and deployed Docker containers to break up internal monolithic applications into Microservices. Data Scientist, Analytics San Francisco, CA March 2014 to March 2016 Created Predictive models to assist business make data-driven decisions.   Developed Predictive models (lead prioritization, churn prediction) to help sales teams identify business opportunities and growth drivers.   Created controlled Product experiments (service fees, demand, etc.) and measured their impact on market dynamics.   Developed generalized linear models for rental price prediction.   Performed Feature Engineering for large unstructured image datasets. Python Developer Kongsberg Oil & Gas Technologies - Houston, TX August 2012 to February 2014 Performed Data wrangling, Data analysis on O&G exploration time-series data using Pandas, PostgreSQL.   Proposed and developed a Random Forest model to predict ROP which could save a lot of operational costs and time during drilling.   Developed scalable RESTful APIs using Django, MySQL for tracking sales and reviewing performance. Build and Release Engineer T-Mobile - Seattle, WA July 2010 to August 2012 Led Continuous Integration/Continuous Delivery(CI/CD) efforts in multiple environments.   Developed efficient automated Build/Deploy pipelines that reduced integration issues and improved code quality and migrated various on-premise applications to AWS cloud. Education M.S University of Michigan - Ann Arbor, MI B.S in Computer Science Oregon State University - Corvallis, OR B.E in Engineering Andhra University College of Engineering Skills Machine Learning, Deep Learning, Natural Language Processing, Python, C/C++, Numpy, Pandas, Keras, Tensor Flow, Scikit-learn, Spacy, NLTK, gensim (9 years), Machine Learning, Algorithm, Python, C, Computer Science

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