

Python Developer Python Developer Python Developer New York, NY ? Around 3 years of experience as a Python Developer, Artificial Intelligence, Machine Learning, Statistical Modelling, Data Science, Data Mining, Algorithms and Data Structures and Web development. ? Proficient in machine learning and deep learning skills for multiple application including Computer Vision, Recommendation Systems and Natural Language Processing. ? Experience with mathematical and statistical Python Libraries such as pandas, skit-learn, NumPy, NLTK, Pytorch, SciPy, TensorFLow, Keras and software such as MATLAB and R. ? Deployed, debugged and maintained complex, distributed software stacks, containing Apache Spark, Hadoop HDFS and IPython Notebook servers, on cloud-based AWS system by optimizing the stacks for best computational performance and stability. ? Extensive experience with advanced mathematics, statistics, applied machine learning and visualizing complex data and concepts to diverse audiences. ? Expertise in transforming business requirements into analytical models, designing algorithms, building models, developing data mining and reporting solutions that scales across massive volume of structured and unstructured data. ? Proficient in ORM(Object Relational Mapper) libraries for manipulating the data ? Experienced in generator functions and generator expressions. ? Hands on experience in using Tensorflow and Probabilistic Graphical methods (Bayesian and Gaussian networks) to create machine learning models. ? Ability to document ML project requirements and assess deliverable timelines. ? Excellent working knowledge in UNIX and Linux shell environments using command line utilities. ? Experienced with GPU computing and data mining. ? Experience with templating language for the server side. ? Experienced using tools for MDM(Master Data Management) like Oracle MDM and Reltio ? Experienced in implementing data analytics solutions in AWS (EC2, EMR. S3), Google Cloud, Microsoft Azure. ? Used AWS Lambda Functions to trigger the code and managed custom performance and security along. ? Experienced in Agile, Scrum, Waterfall and Sprints methodologies. ? Experienced with object-oriented programming (OOPS) concepts using Python, C++ and Java. ? Excellent skills in analyzing big and complex data, data matching, identify anomalies , and providing usable insight to internal and external data activities and trend ? Proficiency in implementing Multi-threaded applications and using Super computer servers ?

Web/Application Development with deep understanding of the technologies which involves analysis, testing, design, development, implementation and maintenance of various web based application using Python and Django.3+ ? Experienced in developing consumer-based custom features and application development using Python, Django, HTML5/CSS, XML/JSON, JavaScript. ? Vigorous knowledge in progressing web applications and effectuating Model View Control architecture using Django web application framework. ? Good knowledge of web services with protocols SOAP, REST. ? Strong Communication and Presentation Skills substantiated in past assignments with developers, project managers, subject-matter experts, stakeholders, system implementers, and application end-users. ? Experienced with Unit Testing, System Integration Testing (SIT) and User Acceptance Testing (UAT). ? Good experience in error and exceptional handling. ? Good knowledge of NoSQL databases like MongoDB and Cassandra and as well as relational databases. ? Experienced with version control systems like Git, SVN to keep the versions and configurations of the code organized. ? Hands-on experience in writing and reviewing requirements, architecture documents, test plans, design documents, quality analysis and audits. ? Good knowledge on Database Definition Language, Database Design, Data Warehouse Design. ? Experienced in designing the automation framework using Shell scripting. ? Proficient in research of current process and emerging technologies which need analytic models, data inputs and outputs, analytic metrics and user interface needs. ? Quick learner and keen to adopt the cutting-edge technologies.

**TECHNICAL SKILLS** Authorized to work in the US for any employer Work Experience Python Developer UNMBBER - Albuquerque, NM May 2018 to December 2018 The UNM Bureau of Business and Economic Research (UNMBBER) is the recognized expert in providing socioeconomic data and forecasting in New Mexico. UNMBBER's research team provides economic forecasting as well as economic research services and data communication tools tailored to the needs of clients - public, private, nonprofit, and philanthropic - seeking to understand and shape public policy on the state, regional, and local levels. UNMBBER's services and research help leaders in New Mexico to understand, forecast and identify trends and changing economic markets across the state of New Mexico in order to inform decision making. **Roles & Responsibilities** ? System administrator for

servers on Amazon Web Services: Handling production and staging server instances, Server Database Management, Creating API node for new functionality ? Managed database of more than 10MM records of data by writing scripts and macros to automate data updating and cleaning process which saved monotonous working hours. ? Responsible for architecting, designing, implementing and supporting of cloud based infrastructure and its solutions. ? Involved in writing Python API for Amazon Lambda to manage some of the AWS services. ? Performed data pre-processing to clean, eliminate outliers in data and conducted data exploration to detect correlation, trends and patterns in the data ? Imported the big socio-economic data files , created functions to read and join the files and generated data visualizations of state wise statistics of the data using Python libraries and d3.js for displaying in the web and connected all the visualization directly to the database ? Utilized Postgre SQL, data warehousing programs, Tableau, and other dashboard/visualization tool sets for data intelligence and analysis. ? Linked all the critical data to a common point of reference using Reltio (MDM) and sharing among different group of researcher. ? Designing, reviewing, implementing and optimizing data transformation processes in the Hadoop and Informatica ecosystems ? Led several big data machine learning initiatives involving the design, development and deployment of advanced machine learning algorithms that impacted more than 1000 local business. ? Predicted how sick leave would affect the local and small scale business in New Mexico in upcoming 10 years, by leading the survey team to collect and clean the data and preparing the Machine learning model. ? Worked with the research team to forecast the poverty rate of New Mexico in upcoming years by building the machine learning model for the large set of Census data of New Mexico. ? Build the ML model to forecast how much a new company, that is being established, would increase the employment rate and GDP in the present economy. ? Build sentiment analysis model using Natural Language Processing (using NLTK) for new startup in New Mexico are based on customer reviews. ? Worked with several government client, like MRCOG (Mid-Region Council of Governments) by providing them with clean data set and visualization for regional development planning. Build the water level visualization for all the water resources in New Mexico by collecting the data from the on-site sensors that would update in every

5 minutes. ? Worked parallelly with the research team to forecast the impact of new start up in the economy of New Mexico. Python Developer / Data Scientist DataRobot - New York, NY May 2017 to May 2018 DataRobot is an Automated Machine Learning product firm. Helped DataRobot acquire new clients working with decision makers, conducting Proof of Concepts, nurturing prospects into clients and developing collaborative culture. Roles & Responsibilities ? Ensured alignment with key technology and business stakeholders across globally diverse, Agile teams. ? Helped Bank of America through building predictive models in FX, Fixed Income, Investment Banking, Research, Commercial Lending, Wholesale Credit, Client Relations, M&A. ? FX Volume Prediction: built time series models to predict daily FX volume for CLS at a minute level using data from primary exchanges - EBS, Reuters, BofA volume, bid and ask rates, spreads, VWAPs, simple and exponential moving averages, order book entries, etc. Used Bollinger Bands, MACD, market events, and holidays for EUR/USD, USD/CAD, etc currency pairs. MASE values were impressive compared to a na ve model. ? Customer Attrition Prediction: built a highly successful customer attrition predictive model with 80% accuracy on FICC electronic trading from Bloomberg terminals using time series, feature engineering with financial ratios, etc. ? Capital Review Committee Revenue Prediction: predicted yearly revenues for years 1 to 3 for the bank on 16 products ranging from Treasury, Advisory, Credit to FX, and had beat bankers estimates. ? Funded Loan Growth Prediction: developed predictive models for funded loan growth for the Corporate Banking group at Bank of America and improved prediction probability six times. Found key drivers and early indicators. ? Worked with Balyasny Asset Management (BAM) hedge fund, JPMC, TD Bank, GRA (Global Risk) at BAML ? Used Oracle MDM to share critical data among different departments and personal. ? Built custom machine learning models on large datasets in use cases such as optimal capital allocation, commercial loan growth, customer attrition, market trend prediction for the bank. ? Built multi-class sentiment analysis models on bank's research reports using NLP and Spacy. ? Moved Machine Learning projects into production and created tangible value for the firms. ? Brought business insights showing feature interactions in ratings tables, prediction explanations. ? Built several workflows that combined data preprocessing steps with feature engineering, feature

selection, model selection, hyper-parameter tuning, model stacking, blending, using cross validation to avoid over fitting, validating models with lift charts and ROC curves, explaining insights through feature importance analysis, partial dependency plots. Handled class imbalance and large datasets. Explored human - machine hybrid approaches. ? Captured trends, seasonality patterns through time series models such as ARIMA, used lag variables and sliding window techniques, feature engineered variables through iterations. ? Analyzed unstructured text in analyst reports, built sentiment analysis using TFIDF, NLP, Spacy. ? Balanced algorithm accuracy over speed in XGBoost, Random Forest, GLM, ENet Blender, Logistic. ? Worked with bank regulators on variable stress testing, parameter sensitivity analysis. ? Built challenger models for BAML regulators, the Model Review Management group, a three month long process, with variable stress testing, hyper-parameter sensitivity analysis, out of time validation, and model deployment. ? Helped Humana insurance with Marketing mix optimization, Emergency Room attendance estimates. ? Developed Oil recovery models for Hunt Oil, and transport ETA predictions for Rail Inc. and BASF. ? Handled large scale transactional, trading, loan, hospital, transportation, oil production data. ? Evangelized Artificial Intelligence, Machine Learning through presentations, online webinars, blogs. ? Wrote popular blogs on Machine Learning and received company's special award on content creation. Environment: Python, R, SKLearn, Time Series, ARIMA, Multiclass, Anomaly Detection, Feature Engineering, Imbalanced data, SQL, Hive, Hadoop, Tableau, Spacy, NLP, Spark, DataRobot, Eureka, Nutonian Education computer science, mathematics University physics and programming skills April 2012 Bsc in Math Computer Science University of New Mexico (School of Engineering) Center for Academic Program Support Skills Hadoop (1 year), Hive (1 year), machine learning (1 year), Python (1 year), Sql (1 year)

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