

SOFIA DUTTA

Aspiring Data Scientist and Machine Learning Engineer | Email: sofiad1@umbc.edu

SUMMARY

- Aspiring Data Scientist and Machine Learning Engineer
- 7 years of experience in Software Consultancy and Data Analysis

EDUCATION

Current – 2019	Master's in Data Science, UMBC, Baltimore, USA	4.0/4.0
2010 – 2006	Bachelor's in Computer Science and Engineering, WBUT, India	3.5/4.0

Data Science Projects

- 📖 Comparison of Word2vec and Doc2Vec model driven Sentiment Analysis using SVM, LR, Keras CNN, Bidirectional LSTM with and without pre-trained Word and Document Embeddings.
 - 📖 Sentiment Analysis on Amazon laptop reviews: https://sofiadutta.github.io/datascience-ipynbs/sentiment-analysis/Sentiment_Analysis_Amazon_Laptop_Review.html
 - 📖 Sentiment Analysis on IMDb movie reviews: https://sofiadutta.github.io/datascience-ipynbs/sentiment-analysis/Sentiment_Analysis_IMDB_Movie_Review.html
- 📖 Data characterization of Baltimore City Employee Salaries to study income inequality in Government
Link: https://sofiadutta.github.io/datascience-ipynbs/EDA/Data_Analysis_Baltimore_City_Salaries.html
- 📖 Data characterization of NYC Film Permits to figure out where my favorite films being shot at
Link: https://sofiadutta.github.io/datascience-ipynbs/EDA/Data_Analysis_NYC_Film_Permits.html
- 📖 Data characterization of NYC Fire Department data to find impactful events via a data analytics path
Link: https://sofiadutta.github.io/datascience-ipynbs/EDA/Data_Analysis_NYC_Fire_Department.html
- 📖 Big-Data Analytics and Sentiment Classification with Twitter Stream Data. See project links below:
 - 📖 Big data analytics: Tweet Sentiment Classification and Big Data Analytics using Spark Dataframe
 - 📖 Big data analytics: Tweet Stream Analysis using PySpark
 - 📖 Big data analytics: Tweet classification via Word2Vec models, Spark MLlib and my own classifier

TECHNICAL SKILLS

Platforms	Mac, Unix, Windows
Languages	Python, Java, SQL, PL/SQL, TSQL
Tools & stacks	Scikit-learn, Keras, PyTorch, Tensorflow, MLlib, PySpark, PL/SQL Developer, Oracle Report/Forms/Workflow Builder
AI Technologies	Knowledge Graph, Semantic Web, Protégé, SPARQL, OWL
Back-end	MongoDB, Oracle (9i, 10g, 11g)
Enterprise tools	Google Cloud, AWS S3, Oracle Fusion 11, Oracle Applications (R12 & 11i)

WORK EXPERIENCE

Current – 2019	Student researcher in Semantic Web and Smart Home Access Control, Ebiquity Group, UMBC, USA
2018 – 2010	Software Consultant and Data Analyst at Tata Consultancy Services (TCS) Ltd., India

TCS PROJECTS

Feb'18–Jan'17	Commercial Bank of Dubai, UAE <ul style="list-style-type: none"> • Was a key project resource trained to work with Oracle Fast Formulas • Led a team of developers working on Oracle Fusion Human Capital Management (HCM) functionalities like resignation, transfer, promotion, performance rating etc. • Prepared software design and test plans documents • Performed requirement and change analysis.
Nov'16–Sep'16	Kaiser Permanente, USA

	<ul style="list-style-type: none"> Led a team of developers working on Oracle Fusion (HCM) functionalities Prepared software design and test plans documents Performed requirement and change analysis.
Jun'16–Feb'16	<p>Hyatt-Oracle R12 Rollout, USA</p> <ul style="list-style-type: none"> Ensured efficient execution of data queries using PL/SQL stored procedures. Worked on ACH payment, invoice management and HRMS configuration. Performed requirement and change analysis.
Feb'16–Jun'15	<p>Staples, USA</p> <ul style="list-style-type: none"> Ensured efficient execution of data queries using PL/SQL stored procedures. Worked on ACH payment, invoice management and HRMS configuration. Performed requirement and change analysis.
Jun'15–Jan'14	<p>DHL, UK</p> <ul style="list-style-type: none"> Ensured efficient execution of data queries using PL/SQL stored procedures. Handled HRMS and Payroll configuration and administration. Seamlessly managed data migration activities from Oracle Apps to ERP Suite. Performed requirement and change analysis. Tested system functionality and bug fixes.
Jan'14–Sep'13	<p>Tata Steel, India</p> <ul style="list-style-type: none"> Ensured efficient execution of data queries using PL/SQL stored procedures. Worked on software design and test plans documents
Sep'13–May'13	<p>IHCL - R12 Reimplementation, Taj Hotel, Mumbai</p> <ul style="list-style-type: none"> Ensured efficient execution of data queries using PL/SQL stored procedures. Handled change management activities for Oracle reports, forms and databases. Seamlessly managed data migration activities. Worked on software design and test plans documents
May'13–Apr'13	<p>CMCL - Oracle ERP R12 Implementation, Star Cement, Kolkata</p> <ul style="list-style-type: none"> Ensured efficient execution of data queries using PL/SQL stored procedures.
Apr'13–Jun'11	<p>Bangladesh Railway Oracle Apps, Bangladesh Railway, Bangladesh</p> <ul style="list-style-type: none"> Ensured efficient execution of data queries using PL/SQL stored procedures. Developed report generation packages for payroll management Worked on software design and test plans documents

CERTIFICATIONS COMPLETED

- o Oracle 9i SQL (1Z0-007)
- o Oracle 9i PL/SQL (1Z0-047)
- o Oracle Database 11g: Advanced PL/SQL (1Z0-146)
- o Oracle E-Business Suite 12 Financial Management Implementation Specialist: Receivable (1Z0-518)
- o Oracle Fusion HCM Base Cloud Service 2016 Implementation Essentials (1Z0-329)
- o Oracle Global Human Resources Cloud 2017 Implementation Essentials (1Z0-965)
- o Oracle Talent Management Cloud 2017 Implementation Essentials (1Z0-966)