

Baofang (Luna) Zhang

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SUMMARY

Over five years working experience in data processing, analyzing, machine learning; experienced in supervised learning as well as unsupervised learning in data science; excellent communication skills with both technical and non-technical; self-starter and team player with cross-functional teams at all levels.

SKILLS

- Python (Numpy, Pandas, Scikit-learn, Matplotlib, Seaborn, SciPy), SQL (MySQL, PostgreSQL), Jupyter, Tableau, Spark, Google Cloud, Linux, Jira, Git, MS Project, Excel, Slack, SharePoint
- Machine Learning (Regression, Classification, Clustering), Optimization, Data Mining, Statistical / Predictive Modeling, Data Visualization, Logistic Regression, Decision Trees, Random Forest, GBoost, XGBoost, SVM, K-nearest Neighbor (KNN), Naïve Bayes, Feature Engineering, NLP (NLTK), Deep Learning (Tensorflow, Keras), Experiment Design & Analysis, A/B test experiment

WORKING EXPERIENCES

Data Scientist

San Mateo, CA

Techlent, Inc

02/2020- 08/2020

- Built a price optimization model as a team leader to predict product price and analyze profitability using regression models including multivariate regression, Random Forest, Gradient Boost, XGBoost with Scikit-Learn, achieved ~20% revenue increase
- Created a classification model to accurately predict COVID-19 patients' status, and performed SMOTE to solve the binary classification imbalance problem; based on the AUC values, adopted the XGBoost model to predict patients' status, wrapped the final model as an API using Flask and served it on google cloud to facilitate use

Research Scientist/Data Scientist

Raleigh, NC

Pidilite USA Innovation Center

07/2017-10/2018

- Optimized formulation methods to solve the adhesive bubble issues using gradient descent search skills, performed data processing, visualized experiment conditions and results; achieved the desired product properties within three months

Research Scientist/Data Scientist

East Lansing, MI

Michigan State University

05/2016-06/2017

- Built a forecasting model to predict the concentrations of aromatic compounds in different flavor beverages using polynomial regression algorithm; conducted univariate and bivariate analysis to explore data trend and select features; and regularization technique to avoid overfitting; adopted polynomial regression model with degree 3, and achieved high metric R^2 value (0.98); the prediction model replaced the CocaCola company's previous laborious lab method and saved money for chemical materials

Research Scientist/Data Scientist

Baton Rouge, LA

Louisiana State University Agricultural Center

08/2008-12/2010

- Used statistical analysis methods to link the underground carbon transformation to the aboveground emissions of carbon and non-carbon greenhouse gases

Research Scientist

Xinxiang, Henan, China

Henan Normal University

07/2006-07/2008

- Predicted hybrid materials properties using simulation methods; the optimized stable microstructures information is close to the experimental results of hydrotalcites

EDUCATION

Ph.D.	Polymer Chemistry	University of Akron	Akron, OH	05/2016
M.S.	Physical Chemistry	Beijing University of Chemical Technology	Beijing, China	06/2006
B.S.	Chemistry	Henan Normal University	Xinxiang, Henan	06/2003