

Baofang (Luna) Zhang

Green Card holder

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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

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