SONG WANG Data Scientist

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Summary

Scientist with 3+ years of experience executing data-driven solutions to increase efficiency, accuracy, and utility of internal data processing. Experienced at creating data regression models, using predictive data modeling, and analyzing data mining algorithms to deliver insights and implement action-oriented solutions to complex technical and business problems.

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Python/SQLite3/PostgreSQL Data mining/processing

Machine learning Data visualization Natural language processing Data cleaning

Statistical analysis Experimental design

Recent Projects

20 News Groups | Github:

https://github.com/sw299/Thinkful Capstone Projects/blob/master/NLP Capstone Project.ipynb

- Applying NLP techniques to classify text documents into various news groups
- Tech: Language parsing

supervised/unsupervised NLP

Word2vec

Text summarization/ extraction

Bank Marketing | GitHub:

https://github.com/sw299/Thinkful Capstone Projects/blob/master/capstone supervised learning.ipynb

- Utilized machine learning algorithms to predict if clients will subscribe deposit service and achieving 88% accuracy
- Tech: Knn/Random Forest/Gradient Boosting/SVM/Logistic Regression PCA Cross validation/Accuracy score Credit Card Fraud Detection | GitHub:

https://github.com/sw299/Thinkful Capstone Projects/blob/master/capstone unsupervised learning.ipynb

- Conduct clustering algorithms and dimension reduction methods to identify fraud, and achieving a 90% accuracy
- Tech: KMean/Hierarchical/Gaussian Mixture Models PCA/TSNE/UMAP Rand Index/Confusion Matrix

Experience

ENCINA Basking Ridge, NJ 03/2018 - present

- Research Scientist
- Conducting statistical analysis, model estimation and lead research activities.
- Large-scale data cleaning, data interpretation, and cross-correlation analysis.
- Generate insights connecting simulation results with design and business problems and objectives.
- Work cross with vice president, and senior leaders in the engineering and research teams.

THINKFUL New York City Data Science 07/2019 - 11/2019

- Immersive program involving advanced statistics, data analysis, visualization, and machine learning techniques.
- Pursued more advanced topics such as Deep Learning with Keras and TensorFlow, CNN, RNN, NLP.
- Independently completed Capstone projects and articulate research findings with data scientists affiliated with Thinkful.
- GitHub URL: https://github.com/sw299/Thinkful_Capstone_Projects

Education

NEW JERSEY INSTITUTE OF TECHNOLOGY

Ph.D. Chemical Engineering M.S. Chemical Engineering **B.S. Chemical Engineering**

05/2014 - 12/2017 01/2013 - 05/2014

09/2008-06/2012