JAMES BABYAK

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I'm a data scientist who strives to make a positive impact on critical issues. I excel at pattern recognition and use my skills to extract insights from hidden details and collaborate with people to make informed decisions.

SKILLS

Business | Data Visualization, Design Methodology, Teamwork, Leadership
Analytics | Data Analysis, Quantitative Analysis, Statistical Analysis
Machine Learning | Classification, Regression, Clustering, Feature Engineering
Programming | Python, NumPy, Pandas, Scikit-Learn, NLTK, gensim, SQL, Tensorflow
Data | Data Mining, Data Munging, Data Cleaning, EDA, Natural Language Processing (NLP)
Software | Tableau, Excel, Spotfire, Azure Data Studio, ETL

EXPERIENCE

Southwest Key Programs Feb 2019 – Current
Data & Analytics Specialist, Performance Quality Improvement
Led the management of data analytics and visualization projects across non profit organization to improve the outcomes of immigrant unaccompanied minors in shelter care

- Uncovered details of youth's records classified as 'Other' by using NLP to discover similar categories, then implemented new data collection protocols resulting in reduced misclassification by 40%
- Identified key indicators for extended length of stay in shelters using regression and bagging techniques and developed action plans with stakeholders

General Assembly Jul 2018 – Oct 2018
Data Science Fellow, Immersive Program
Attended program focusing on the ability to analyze complex datasets, convey data-driven content, and make predictive models using machine learning and artificial intelligence.

- Used topic modeling techniques in NLP to detect behavior changes in language used by individuals associated with mental health disorders
- Created a predictive model with an AUC score of 0.77 to detect West Nile Virus outbreaks and led the engineering of time series and spatial features

Frontier Energy Jun 2015 – Jul 2018
Technical Analyst, Energy Consulting

- Created predictive models to determine savings for energy efficiency projects and developed documentation used by utilities to track program metrics
- Conducted market and data analysis of new energy efficiency technologies and convinced clients to adopt three new measures into their program

Samsung Austin Semiconductor Jun 2010 – May 2015
Equipment Engineer, Photolithography Operations

- Identified and led projects that reduced equipment downtime by 25% through data analytics, applying statistical models, and testing new algorithms
- Organized quality projects to redesigned sensor data collection methods, and led the deployment of improvements across all four global manufacturing sites

EDUCATION

General Assembly
Data Science Fellow
The University of Texas at Austin
Bachelor of Science in Mechanical Engineering