

## ADRIAN CADENA

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### PROFESSIONAL EXPERIENCE

#### FedEx - Collierville, Tennessee

##### Senior Data Analyst

May 2020 – Current

- Driving annual savings of \$15,000 by developing automation bots to download thousands of invoices per month, analyze pdf files, extract data, and store information for analysis, reporting, and reconciliation
- Improving forecasting accuracy by 8% to support IT's Strategic Outlook for the next three fiscal years by leveraging Feedforward and LSTM Neural Network algorithms
- Predicting vendor names with 90% accuracy by utilizing a Jaro-Winkler distance algorithm to match strings

##### Advanced Intern – Data Analyst

Jan 2020 – May 2020

- Increased productivity by 6% by building pipelines to automate data processing and dashboard creation
- Implemented and managed a Tableau Server used by multiple teams for data storage, EDA, and monthly reporting
- Increased query speed by 20% and boosted the productivity of a finance team by applying SQL tuning techniques

##### Finance Intern – Data Analyst

Jun 2019 – Aug 2019

- Presented recommendations to increase the expense-to-return ratio growth after analyzing \$30 million in awards and programming statistical models to evaluate the FedEx Technology Incentive Program's effects on revenue.

#### Los Pasteles Caseros de Gaby LLC - McAllen, Texas

Jan 2016 – Aug 2018

##### Financial Data Analyst

- Boosted operating profit by 4% of total revenue by planning and implementing an ERP management system
- Studied elasticity of demand to find optimal prices, which boosted net revenue and increased gross margin by 3.2%
- Forecasted sales and created a purchase-strategy for raw materials with a value of \$325,000 during high-demand periods

### PROJECTS [\[LINK\]](#)

#### Featured projects (sports analytics):

- Completion Percentage Over Expectation (CPOE) [\[LINK\]](#)
  - Predicting the completion probability of a pass to evaluate QB's ability by looking at residuals (+/-)
  - Stochastic Gradient Boosting Classifier
  - Using public data, I explained 89% of the variance of NFL Next Gen Stats' CPOE model
- Which defensive line position is the most valuable? Quantifying positional value – S. Struthers, A. Cadena [\[LINK\]](#)
  - Submission for the Sports Info Solutions Analytics Challenge. Mentioned in the "highlights" of the competition
  - Considered unique due to analyzing which position helps the other the most [\[LINK\]](#)
- Estimating the individual likelihood of pass completion for each Quarterback [\[LINK\]](#)
  - Logistic Generalized Additive Mixed Model, utilizing quarterback as a random effect
  - Only tutorial covering Generalized Additive Models in [opensourcefootball.com](https://opensourcefootball.com)
- Analyzing Home Field Advantage in the NFL [\[LINK\]](#)
  - Found HFA to be sharply decreasing during the last couple of seasons and team-specific HFA to be volatile, unpredictable and insignificant during an extended period of time
  - Novel approach consisting on adjusting for opponent, team strength, coaching competence, and QB's ability

### EDUCATION

#### The University of Texas at Dallas - May 2020

*M.S., Business Analytics: Data Science Track.* Scholar of recognition. GPA: 3.75/4.0

Coursework: Statistics and Data Analysis, Programming for Data Science - Python, Advanced Business Analytics - R, Prescriptive Analytics, Database Management Systems, Applied Machine Learning, FinTech & Blockchain

#### The University of Texas Rio Grande Valley - Dec 2015

*B.B.A., Double major in Finance and Economics.* Magna Cum Laude. Beta Gamma Sigma Honor Society. GPA: 3.72/4.0

### TECHNICAL SKILLS

**Programming Languages:** SQL, Python (Pandas, Scikit-learn, StatsModels, Keras), R (dplyr, ggplot, XGBoost, lmer), SAS

#### Algorithm experience:

- Regression: K-Neighbors Regressor, Ridge, Lasso, Elastic Net, SVR, Decision Tree Regressor, AdaBoost Regressor
- Classification: Gradient Boosting, Random Forest, SVC, K-neighbors, AdaBoost Classifier
- Statistical models: GAM, Mixed-Effects, Fixed Effects, First Differences, GAMM, Logistic, Multilinear
- Other: K-means, PCA, Hard-Voting, Soft-Voting, Bagging, Pasting

**Tools:** Git, Alteryx, Dataiku, Oracle, Tableau, MS Azure, Excel, Markdown. **Additional skills:** Fluent in Spanish