Amanda Gomez

@   ☎   *Data Scientist*   in   ⬛

As a high school math teacher, I found and developed my talent for communicating complex ideas through engaging storytelling. Once I knew I could help others interpret and draw conclusions from data, I knew my tenacity, gregariousness, and principled mindset would aid my success in the data science world.

TECHNICAL SKILLS

SQL | Python | Tableau | Jupyter Lab | Excel | Pandas | Numpy | Seaborn | Matplotlib | Scikit-Learn | SciPy | Applied Statistics | Machine Learning | Data Interpretation | Presenting | Data Storytelling | Hypothesis Testing | Regression | Classification | Clustering | Time Series Analysis | Anomaly Detection | Natural Language Processing

DATA SCIENCE PROJECTS

America's Blues: An Analysis of Fatal Police Encounters   *June 2021*
COLLABORATIVE CLASSIFICATION PROJECT

Our four-member capstone team acquired a data set from MappingPoliceViolence.org, which has gathered over 9000 police killings from 2013 to May 2021. We collaborated to clean and prep the Excel spreadsheet. After developing our initial hypotheses, we will use Pandas, Seaborn, Matplotlib, and Tableau to explore our ideas. Top drivers of civilian fatalities identified will shed light on changes to be made to save more lives. We then used Scikit-Learn on multiple encoded features to apply to our classification models predicting whether the victim was indeed an attacker. Our final predictive model had an accuracy percent improvement of 39% over baseline.

Coding Language Predictions of Google Github README's   *May 2021*
INDIVIDUAL NATURAL LANGUAGE PROCESSING PROJECT

Using Pandas, Mathplotlib, and SciKit-Learn in Jupyter Lab, I prepped and explored strings of text scraped from Google's Github Repositories to create a model that predicted the primary coding language used in that repository. This predictive model outperformed the baseline model by 28%.

Predicting Animal Shelter Adoptability   *April 2021*
INDIVIDUAL CLASSIFICATION PROJECT

I looked into the possible drivers of adoptability using Austin Animal Center's data accumulated from the past seven years. With a detailed eye, I prepped and explored my data in Jupyter Lab using Pandas, Seaborn and Matplotlib. I then used Scikit-learn to create a logistic regression model used to predict the adoptability of a pet that performed at 82% accuracy.

Predicting Error in Housing Price Estimates   *April 2021*
COLLABORATIVE CLUSTERING PROJECT

As a team of three, we were tasked with uncovering what drivers most affect the amount of error in Zillow's Zestimate score. We collaborated to acquire and prep a SQL dataset provided by Codeup's server. After developing our initial hypotheses, we each used Pandas, Seaborn, and Matplotlib to explore our ideas and used clustering to create new features to apply to our regression models. We then brought our best features together using Scikit-learn to create a linear regression model that beat our baseline model by 3%.

EDUCATION

Data Science Certificate of Completion
Codeup | San Antonio | Jun. 2021
Project-based, 22-week, career accelerator that provides students with 670+ hours of expert instruction in applied data science.

Bachelor of Science in Mathematics
University of Texas at San Antonio | Dec. 2010
- Graduate Cum Laude

Texas State Board Certified 8-12 Mathematics
ESC Region 20: Teacher Orientation & Preparation Program | Aug. 2013
- Effective to Feb. 2026

WORK HISTORY

McCollum High School   *Aug. 2013 to Jun. 2018; Aug. 2019 to Oct. 2020*
Secondary Math Educator / Algebra 1 Team Lead

- Progressively worked to increase my children's satisfactory rate to 86% and accomplished to 7% at a district that began at 67% passing rate when I joined their staff.
- Designed and taught innovative lessons while differentiating and extending for all learners.
- Analyzed district benchmark data and used it to guide re-teaches and determine students' weaknesses or strengths within content standards.
- Drove Professional Learning Community (PLC) discussions to analyze the meaning of 2012 TEKS, curriculum creation, exam data analysis, testing intervention and enrichment, and possible classroom management interventions.
- Member of:
  - Texas Regional Collaborative: A high-intensity professional development, created by the University of Texas at Austin Dana Center, to engage students in meaningful mathematical learning experiences.
  - Harlandale I.S.D. Vertical Team: Collaborate with K-12 teachers in the Harlandale District to identify gaps in our vertical alignment of standards, provide possible solutions, and collaborate to build our children up in their mathematical literacy.

St. Philip's College Early College High School   *Aug. 2018 to Jul. 2019*
Algebra 2 Teacher

- General teaching duties as listed in the previous job title.
- Prepare students for TSI/SAT exams, college, and their adult life by incorporating test-taking skills, logic, and life skills into my classroom.
- Provide guidance as the sophomore class sponsor.
- Organize and delegate assignments to student yearbook members.

JP Morgan Chase Bank   *Feb. 2011 to Jul. 2013*
Document Review Specialist
- Analyzed documents served to our bank to ensure all legal compliance was met.
- Precisely transferred information submitted via fax/mail from legal documents into our bank's database.

Relief Unit Manager
- Took ownership of escalated calls, monitored Apprentice Bankers' performance to identify areas to develop growth, and assist bankers to self-discover answers to their inquiries.
- Attend Relief Unit Manager/Division/Site huddles to gain knowledge of sitewide/team/personal development opportunities to create an efficient work environment.

Consumer Escalations Tier II Specialist
- Collaborate with Telephone Banking Center (TBC) representatives to efficiently help our customers resolve their banking needs and inquiries.