

EXPERIENCE

Procore Technologies, Principal Data Scientist, Santa Barbara, CA

11/2016 - 06/2021

- ➔ Successfully designed, engineered and deployed multiple ML models which identified at-risk customers (churn prevention), improved resource planning with revenue forecasting, optimized sales productivity with lead scoring and prospect revenue estimation.
- ➔ Utilized a variety of techniques including but not limited to regression, neural networks, clustering, and time series forecasts. Built models using Python and deployed them on GCP, with custom input/output data marts in Snowflake, and data pipelines orchestrated with Airflow/DBT, with outputs accessible via Workato/Tableau/Salesforce/Marketo.
- ➔ Championed and created the “IT ML Platform” - where all ML models are deployed and maintained, using GCP, Airflow, DBT, Snowflake, MLflow. Model training & prediction pipelines leveraged reusable TFX components.
- ➔ Lead and managed IT Data Science team projects:
 - **Roadmap/Intake** - identified list of all potential DS projects, ranked projects based on effort required and value provided. Collaborated with executives to prioritize projects according to their department's needs and corporate OKRs, and identify which should be completed. Created detailed resourcing estimates and timelines for each project, and negotiated funding to get final approval. Coordinated intake of new requests.
 - **Design/Build/Deploy** - translated business needs into detailed technical requirements. Coordinated model build process by data scientists and engineers, managed tickets, led scrum meetings, reviewed model code and data for quality/accuracy. Communicated project updates and progress to stakeholders and leadership. Coordinated model deployment with ML, Data, and Systems engineering.
 - **Implementation/Adoption** - collaborated with business stakeholders to design implementation plan for model output - systems design (integration w/ end user systems e.g. Salesforce, Tableau), stakeholder education on model design, model inputs/outputs, and how to interpret model results. Created content for end user training videos, wrote documentation, and presented demos. Identified and measured success criteria for adoption by end users, and impact of model on key business metrics.
- ➔ Created the “Customer Usage Score” - performed discovery and analysis on 500+ fields and to identify key variables and create a reduced 45+ metrics into a single weighted score (based on extensive qualitative/quantitative research), which was operationalized by the company and became the most reliable indicator of customer churn, and corporate north star metric for managing retention.
- ➔ Championed a 6-month initiative to transform product analytics from “reactive” to “proactive”. Four analysts partnered with 12 product/dev teams, provided training, created 300+ new metrics, and built Tableau dashboards.
- ➔ IT Data Science SME (subject matter expert) for user requirements and functionality in:
 - The creation of an enterprise data warehouse (Snowflake), with accompanying data governance strategy.
 - The rollout of 3 different BI tools (Looker, Tableau, Amplitude).
 - The implementation of a data catalog (Alation).
- ➔ SME for data visualizations, discovery and exploration analysis:
 - Frequently partnered with executives to create custom Tableau dashboards
 - Created the initial COVID-19 impact analysis and presented it to government entities and partnerships.
 - Examples: application usage, sales rep productivity, recruiting pipeline, OKRs, churn, power user analysis

Cielo24, Data Scientist, Santa Barbara, CA

01/2016 – 09/2016

- ➔ Dramatically improved accuracy and speed of customer billing process by creating an automated customer billing system, using SQL and Python, to replace the existing system of manually calculating revenue and invoice data each month in Excel
- ➔ Created a system for testing/scoring vendors which provide CV for videos or images. Based on a manually created “visual transcript” for sample media, vendors were scored on their accuracy of identifying visual objects.
- ➔ Leveraged Google Cloud Vision for labeling objects in videos, using Python API on individual video frames.
- ➔ Increased engineering productivity by creating dashboards in Grafana to track activity and errors
- ➔ Extracted & analyzed data from PostgreSQL DB to create ad-hoc reports in support of the Operations, Finance, and Development departments

Trigpoint Solutions, Data Scientist, Denver, CO

08/2014-07/2015

- ➔ Created an ML model to help customers predict downtime on oil rigs (which costs ~\$100K per hour). Model designed using a lagged-input time-series neural network model in JMP.
- ➔ Implemented the customer-facing RigIQ® business intelligence package, to help customers analyze the health of their oil rigs, and identify possible maintenance/safety/compliance issues before they happened.
- ➔ Created advanced interactive dashboards in Tableau to identify and explore relationships in the data, specifically the relationship between task compliance and downtime on oil rigs. Worked with clients directly to understand the oil drilling process, and visited active drilling rigs to better understand what the data represented.
- ➔ Wrote marketing/sales material, including white papers, research papers, client presentations, and demos.

EDUCATION

University of Denver, Daniels College of Business Denver, Colorado

2010-2014

Bachelor of Science in Business Administration, **Major: Statistics**, Minor: Economics

SKILLS

Languages: Python, SQL, SAS, R

Data/BI Tools: Snowflake, GCP, DBT, Tensorflow/TFX, Airflow, AWS, JMP, Tableau, Looker, NewRelic, Amplitude, Lattice/D&B, Interana, Splunk, Grafana

Other: Github, JIRA, Alation, Salesforce, Marketo, Workday, Zuora

Certifications: Microsoft Office Specialist - Word, Access, Excel, PowerPoint