David Ly

(408) 892-6862 | davidtnly@gmail.com | https://davidtnly.github.io/

Technical Skills & Knowledge

- **Languages/Frameworks:** Python (Sci-kit, Matplotlib, Seaborn, Pandas, NumPy, Keras, TensorFlow), R, SQL
- **Platforms/Environments:** Tableau, Visual Studio, Microsoft SQL Server, Alteryx, Jupyter, PyCharm, RStudio
- **Topics:** Data Visualization, Data Cleaning & Storytelling, Statistical Analysis, Predictive Analytics (Machine Learning, Regression, Classification), Feature Engineering, Introductory Deep Learning & Cloud Platforms

Experience

Business Analyst, Reporting & Analytics – loanDepot, Wholesale (Oct 2016 – Present)

- Co-own development of all business intelligence matters with hands-on ownership of all analytics and reporting including data quality assurance, data and report automation, and creation of new dashboards for 600+ users
- Led cross-functional teams that involved restructuring company data processes that contributed to $823M in growth, a reduction of national cycle times by 49%, and thousands of additional files processed
- Led data democratization initiatives to drive faster business decisions, which is projected to have a monthly increase of $141M in volume and 400+ units processed
- Mitigated complex data integrity issues with our third-party market data, which involved processing 10M+ rows of data monthly in Alteryx/SQL that is presented to executives in Tableau
- Increased operation's production by 78% while reducing costs by 20% by measuring risks and productivity data
- Developed new scoring models in Python/SQL and productionized in Tableau to assist stakeholders identify high impact business qualities and risks to drive new company initiatives
- Prototyped forecasting models to reduce manual work and used together with funding models that utilize feature selection insights developed in Alteryx/Python to design actionable plans

Customer Satisfaction (Business Analyst) – Kia Motors America (Mar 2016 – Jul 2016)

- Increased CSI rank by 1 by providing recommendations after discovering data trends in customer feedback data
- Improved service scores by an average of 30 points by conducting risk assessments for individual dealerships
- Project management for the new Elite Service program through design, website QA testing, and data management

Business Analyst / Analytics Consultant – Twelve Springs (Jul 2015 – Jul 2016)

- Saved company over $9,000 by driving brand performance, customer acquisition and digital strategies internally
- Increased web and mobile traffic by 7x and KPIs by 1.5x – 2x by utilizing customer cluster analyses
- Led team in reporting to executives and presented new marketing methodology, which was adopted to improve online presence, increase rate of inquiries, and to understand our customer base better
- Created all SQL queries and collaborated to define data structures and sources required for the data pipeline
- Worked on customer segmentation projects involving lead generation, and estimated chances of leads booking

Personal Projects

COVID-19 Dashboard and Forecasting (Jan 2020 – Present)
- Designed a dashboard on global cases and currently working on a predictive/forecast model at a county level

Customer Analytics Predictive Series (Aug 2019 – Sep 2019)
- Series of 9 notebooks on consumer data using machine learning, uplift models, A/B testing, clustering, etc.

Pneumonia Detection on Chest X-Rays with Deep Learning (Aug 2019 – Sept 2019)
- Developed a customized 5-layer CNN with 87% accuracy and F1-score
- Trained thousands of convolutional neural networks from scratch to classify and detect pneumonia

Apple Health & Personal Data Exploration / Visualizations (Jul 2019 – Aug 2019)
- Analyses on personal health activity (900k+ rows) and study topics data using Python and Tableau

Education & Coursework

University of California, Irvine // Bachelor of Arts in Economics and Minor in Psychology (June 2015)