

Mark Susol

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STAFF DATA SCIENTIST

I am seeking opportunities to lead initiatives or teams at the forefront of AI and Machine Learning. Whether as an individual contributor or a manager, my goal is to foster a culture of continuous learning and improvement, guiding teams to unlock new potentials in AI, and translating complex data insights into actionable business strategies.

- **Programming:** Expertise in Python, SQL and R for data analysis, modeling, and visualization.
- **Data Analysis:** Perform exploratory data analysis, hypothesis testing, and derive insights.
- **Data Visualizations:** Clear, informative visualizations using Matplotlib, Seaborn, ggplot2, or Tableau.
- **Machine Learning:** Implement & tune supervised online models with scikit-learn, TensorFlow.
- **Project Management:** Planning, execution, collaboration with cross-functional teams.
- **Tech Leadership:** Influencing technical culture as a full-stack data science expert.
- **Communication:** Articulate data insights and findings to cross-functional stakeholders.

WORK EXPERIENCE

Google • Boulder, CO

09/2015 – Present

Staff Business Data Scientist

- Improved Google's support routing match accuracy by 35% with advanced online ML models using TensorFlow, saving Google substantial costs via real-time serving technologies, e.g. Snowflake for ML.
- Performed qualitative analysis for Google's Text to Image generative AI initiative, providing valuable insights regarding bench marking internal tools performance.
- Leveraged clustering, topic modeling, logistic regression, and multiclass classification to derive ad-hoc insights into business operations, resulting in a 25% improvement in decision-making.
- Established a Natural Language Processing (NLP) focused research initiative on raw user text analysis, enabling symptom clustering, detection of emerging issues in user feedback, and evaluation of contact form efficacy, thereby enhancing responsiveness and insights into user experiences.
- Conducted 193 technical interviews evaluating candidates for data engineering or analyst roles.

SQL Readability Admin [20% project]

- Spearheaded a five-person, cross-functional admin team at Google, analyzing new features of GoogleSQL and effectively refining the global SQL style guide, enhancing readability across the organization.
- Mentored Googlers in SQL code optimization during code reviews, consistently ranking in the Top 5 for review completions, demonstrating expertise in SQL and commitment to team development.
- Conducted GoogleSQL Functions and Modules training for 30-60 Googlers per session, achieving a high feedback score of 4.7 out of 5, reflecting strong instructional skills and subject expertise.

Senior Data Engineer

- Designed and managed the data integration and architecture around raw log processing and integration of support interaction events to build data warehouses and reporting methodologies around time sequence analysis for comprehensive reporting tools and dashboards.
- Managed several innovative data pipeline efforts through cross-functional collaboration between business stakeholders and support engineering teams to improve the quality of business reporting.
- Established and led the gUP Analytics Tech Working Group, enhancing the team's methodologies and overall workflow through dedicated expertise.

Cognizant Technology Solutions • Mountain View, CA

09/2013 – 08/2015

Technical Solutions Engineer

- Created Business Intelligence tools using Google App Engine, integrated with Google Data Services.
- Improved data processing time by incorporating MapReduce in Python and Go, in ETL processes.

REI Systems • Reston, VA

02/2012 – 08/2013

Software Engineer

- Developed SaaS predictive analytics software in Python; Logistic and Linear Regression.
- Built interactive visualizations using AJAX, Drupal REST API, HighCharts, and D3.js

EDUCATION

MS in Applied Physics

University of Maryland Baltimore County (UMBC) • Baltimore, MD

12/1995

BA in Physics

University of Maryland Baltimore County (UMBC) • Baltimore, MD

12/1992

AWARDS & SCHOLARSHIPS

VP Award: Scaled tracking of gPay product outcomes following support interactions.

**03/
2018**

Google

VP Award: Design, development and launch of clickstreams data infrastructures covering all users support interaction

**12/
2017**

Google

SKILLS

Apache Spark, Artificial Intelligence, BigTable, Business intelligence Reporting, Business Intelligence Software, Collaborative Environment, Data Analysis, Database Design, Data Pipelines, Data Science, Data Warehouse, Django, Exploratory Data Analysis, Flume, Generative AI, Go, Google App Engine, Google File System, Hadoop, HDFS, JavaScript, Machine Learning, Management, MapReduce, Mentoring, MySQL, Natural Language Processing, Object Oriented Programming, Performance Analysis, Predictive Modeling, Program Management, PySpark, Python, Quality Monitoring, R, scikit-learn, Snowflake, SQL, Tableau, Technical Leadership, TensorFlow, Test Driven Development, Version Control