Sara (Yun) Song

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Data professional with 6 years of experience in product analytics, advanced modeling and reporting. Experience with executive decision support, technical leadership, consistently delivering high-quality results, mentoring junior team members, and coordinating with other business functions.

SUMMARY OF SKILLS

- Develop **metrics** and share **actionable recommendations** for product or business objectives, evolving them over time to align with changes in infrastructure and business requirements.
- **Use statistical methods** (e.g. A/B testing, power analysis) and **data-mining techniques** (e.g. clustering) to optimize spending and identify highest-value opportunities.
- Experience with communication and BI viz/analytical tools(**Tableau, MicroStrategy, Domo),** web analytics (**Adobe Analytics, Google Analytics, Segment, Amplitude**), Advanced Analytics Language (**Python, R**,**SQL**), and A/B testing tool(**Amplitude)**
- **Build machine learning model**s (e.g. classification, time series) and data pipelines to predict risk and forecast capacity and needs.
- **Communicating with stakeholders**, leading team members to create data pipelines, tables, and dashboards for different audiences, and leveraging these for analyzing trends.
- **Support C-level decision making** with reports on revenue sources, company growth and competitor analysis, and automating reports for real-time reporting.

EMPLOYMENT

Lead product analyst - Growth and Core at BENLabs   **Nov2021–Present**

- Use user behavior data to find opportunities and help teams increase new subscriptions. Reach a **23% conversion rate increase.**
- Use **nature language process/open AI** package to segment user groups by channel description data.
- Spearhead company-wide **A/B testing** and **global holdout guidance** initiatives for cross-functional product teams, resulting in **data-driven decision-making** and **optimized product performance.**
- Conduct **in-depth analysis** of **new user segments**, leveraging both behavioral and YouTube data, and lead A/B testing initiatives for the Growth team to test growth related business ideas. Reach the target goal is **17% increase** for engagement
- Set company **KR metrics** and **dashboards**, And **Lead** baseline analysis for the team and set KRs for quarterly growth goals.
- Propose, design, test the **new data pipeline** to store the Segment/Amplitude event data in AWS.
- Propose, design, test, and implement new statistical revenue estimated model to help performance teams **reduce the risk and increase revenue**.
- Managed a team of two analysts, including one senior analyst and one junior analyst, providing **guidance**, **mentoring**, **and training** to ensure efficient and high-quality work.

Senior BI advanced analyst at Twilio   **April –Nov 2021**
- Propose, Design, Test new **Time Series Machine Learning Methodologies** to build Data Quality Alert System. Achieved **90% precision and 90% recall** for the testing result on several data/reports.
- Use **Machine Learning Driven Analysis**, **A/B testing** to understand the historic patterns of new voice customer acquisition, the growth value of self-service new customers vs sales-assistance new customers.
- Use **advanced SQL query** to analysis and bring insights on how to reopen the office properly. Reports have been built in **Tableau**. This project has been in collaboration with multiple teams, including people team, engineering team, and privacy team.

Senior Data Scientist at DigiCert, Inc.   **May 2018–April 2021**
- Lead **data-mining** project to group 310k customers using **unsupervised clustering** by product use and market share. **Identified high-value clusters** (of 20 and 500 customers) to target marketing efforts.
- Forecast customer retention with **boosting + classification predictive analytics**; achieved **70% precision and 90% accuracy**. Model **used monthly by sales team** to identify customers likely to switch to a competitor.
- Lead project to diagnose and fix major issue in Salesforce / Oracle data pipeline. **Identified $1.6M in uncollected revenue.** Project had **thirteen members across four departments**.
- **Crisis response** for security event **affecting 50k customers** using **Python** automation. Acted for CEO & EVPs, **coordinated Data Engineering** team, met strict deadline.
- Developed and deployed automated staff needs forecast using **Facebook Prophet** and the **SARIMA model**. Daily forecast is within 2% error, **used daily** to assign employee tasks.
- Use **A/B testing** and **statistical modeling + power analysis** to optimize $3M annual digital marketing spend. Model eliminates under-performing ads and has **increased ad impact by 30% and decreased cost by 40%**.
- Analyzed >**$120M** of 2020 **customer retention** opportunities. **Reported to CEO/CFO,** used in developing 2020 business plan.
- Combined five system databases (513M records) into single data mart. **Reduced data renewal time by 20x**; data mart used company-wide (1600+ employees).

Data Analyst at Overstock, Inc. (MSBA Capstone Project)   **May–Dec 2018**
- **Forecast call-center staffing needs** based on calls to optimize customer support operations. Model achieved **93% accuracy**; presented results to company management.

Business Development at Mineral Resource International, Inc.   **Nov 2016–Dec 2017**
- Researched new marketing strategies, analyzed economic data for marketing potential in China, and built business relationships with Chinese food & beverage companies.
- Cooperated with research institutes to evaluate product uses for product analysis.

Project Manager at Junior Achievement (Non-profit Organization)   **Sept 2013-Jan 2014**
- Recruited (15 students), organized events, fund-raised, and negotiated with school
- Named "Excellent Career Go Project Manager" for the year
- Project received "Award of Excellence"

EDUCATION

Certificates in Applied Data Science from Massachusetts Institute of Technology　　**2023**
- Leveraged data skills to apply the latest data science methods effectively

Certificates in Product Analytics from Northwestern University　　**2022**
- Applied data skills to gain expertise in product analytics

MS in Business Analytics from University of Utah　　**2017-2018**
- GPA 3.88; Fall 2018 top 1 graduate student (Academic Excellence Award)
- Graduate Fellowship for exceptional merit and leadership potential

BS in International Economics from Weber State University　　**2014-2016**
- GPA 3.6; Mathematics minor

Bachelor of Economics in Investments from Shanghai Normal University　　**2012-2014**
- Top 1 student 2012, top 1 student 2013

AWARDS & PROJECTS

Women in Data Science Utah 2020&2022　　**2020-2022**
- **Organized conference**, invited speakers, developed website, handled marketing
- Conference filled all slots (20 speakers) and sold out (150 registrations)

Research Paper on impact of SNAP benefits　　**2016**
- Studied impact on health care spending among low-income people
- Published by the WSU Center for the Study of Poverty and Inequality

Stock Analysis and Trading Project　　**2016**
- Used Excel and Mathematica to analyze stock data, wrote program to trade stocks
- Earned $5k in six months on under $10k invested

Top 7 Award in Weber Business Plan Competition for "Pet Heaven"　　**2015**
- Bilingual business plan, market analysis, and revenue projections for pet funeral service, Pet Heaven

SKILLS

R, SQL, Python, Pandas, Spark	LinkedIn, Salesforce, Jira APIs	Bilingual (Mandarin & English)
Oracle, FB Prophet	Domo, Tableau, MicroStrategy	AWS S3, Glue, Athena
Segment, Amplitude		