Sasha XiaoXia Deng

xd67@georgetown.edu | (301) 532-6608 | Maryland, DC | Permanent Resident

EDUCATION

University of Maryland, MD
Expectant M.S. in Data Analytics | *With Certificate in Business Analysis*   *May 2022 – Present*
Georgetown University, DC
M.S. in Communication, Culture &Technology | *Top Merit Scholarship, GPA: 3.9/4.0*   *Aug 2017 – May 2020*
University of Oregon, OR   *Jun 2014 – Aug 2016*
Master in Linguistics
Minor in Computer Information Technology | *Full tuition-waiver scholarship, GPA: 4.0/4.0*
Shanghai University of International Business and Economics, China
BBA in Financial Management | *4 years Merit-based scholarships, Excellent Graduate Honor*   *Sep 2002 – Jun 2006*
Douglas College, Canada
Joint Degree in Financial Markets and Investment Management   *Sep 2003 – June 2006*

SKILLS

CIT Skills
Python, Javascript, Git, AWS S3, Testing & Debugging, Jupyter, Visual Studio Code, HTML, CSS, Web crawling, .Net, Unity, WordPress, Construct 3, Adobe Photoshop, Premier, After Effect
Business Intelligence
Data process and Database modeling, RDBMS, Data Pipeline, Data Cleansing, SQL, Tableau, IBM Cognos Analytics, R, SAS, Advanced Microsoft Excel, Power BI, Agile, Jira, Hadoop, Streak
Analytical Skills
Cluster analysis, Hypothesis testing, Marketing segmentation, Customer profiling, Positioning analysis, Predictive modeling, Time series analysis, AB test, Text analysis, Sensitivity Analysis, NLP
Financial & Business Management
FP&A, Accounting, Budgeting and Forecasting, Cost analysis, Cash Flow Management, Financial Reporting, CRM, MAT

PROFESSIONAL EXPERIENCES

CCACC Academy (The Cathay School), Rockville, MD
Business & Data Manager   Sep 2016 - Present

- Set up and revise annual goals, budget plan, and objectives for each academic semester; created Tableau dashboards to monitor all the related data from 1000+ school courses, including revenue, profit, enrollment, drop rate, and financial indicators, to report to board members for actionable items.
- Compose visualized annual reports to board members and stakeholders, using Tableau (previously IBM Cognos analytics), with items including industry analysis, customer brand perception and experience, business development plan, competitor analysis, and development goals for various departments.
- Cooperate with the company's finance department to create efficient financial management, by using SQL and Advanced Microsoft Excel Functions to monitor financial statements, develop budgets, control costs; Supervise financial reporting and budgeting employees, and seek ways to find expansion/acquisition opportunities. Helped the company achieve a 30% revenue growth rate before the pandemic as an essential leader in the company.
- Developed pricing strategy for new programs and monitored sales performance by conducting industry analysis, collecting students' survey data, and appending new data to the company's internal database. Generated automated algorithms to automate the pricing for programs based on sales performance.
- Conduct sentimental analysis on Python based on 500+ text reviews from parents, volunteers, and students every semester, to actively monitor customer feedback and identify growth potential.
- Oversee the school's SQL database infrastructure development and maintenance including extract-transform-load (ETL), data management, and data model design and communication; Led several data engineering projects such as third-party data matching, transformations, data integration, and data migration to ensure the high-velocity data foundation for the company.
- Optimize profitability by analyzing how customer sales funnels, CLV, and marketing strategies impact profit margins. Using SQL and Excel, identified the most profitable sales channels to create strategies to maximize profit margins. Chaired the most profitable program, the summer camp, by building marketing dashboards, visualizing performance indicators, using pivot tables to create profitability reports, and developing success KPIs to ensure smooth operations including hiring and sales; improved profit margins by 23%.
- Lead the development of the CRM system, including both parents and student portals, to effectively keep track of each student's attendance status and academic status, and track parents' satisfaction level. Developed database infrastructure to store datasets, conduct data transformation and data migration, and monitor customers' satisfaction levels. Used descriptive

analysis on survey data to build linear regression based on demography, enrollment age, class performance, etc. to predict the likelihood of customer repeat enrollment. Prioritized sales and marketing treatment based on customers' returning probability.
- Lead the development of a CRM database to effectively coordinate activities among 1000+ students, their parents, 200+ tutors, and 20+ supervising consultants.
- Developed a course evaluation system to keep track of the popularity of each course, by analyzing the enrollment rate, return rate, waitlist, pre-inquiry rate, and satisfaction level, to create financial KPIs for 1000+ classes.
- Monitor customers' behaviors on the school's website to create variables from actions including class browsing, instructor reviewing, schedule checking, policy reading, and cart behaviors. Converted datasets with multiple records per subject into individual-level analysis-ready datasets, for use in AB tests that will reduce the potential of losing customers.

Gugnir & Partners Consultation, New York, NY
Assistant Data Analyst   Sep 2016 - Mar 2017
- Performed database development, data management, ETL, data cleansing, and data quality control of an online service platform; conducted data reports with visualization using Tableau, including data collection from multiple vendors to match with the company's internal database.
- Conducted data mapping and predictive data analysis, conducted in-depth data analyses using different statistical tools and models for consultation projects, including transfer soccer player value evaluation, used car price determining modeling, and so on.
- Conducted marketing analysis and member segmentation for a Bike Share Program with more than 6000 bicycles and 800 docking stations. Data collection, cleaning, validation, mapping and modeling, documentation, and visualization included. Resolved issues for members with missing customer IDs by matching them with Member System IDs for members whose accounts may still be active.
- Conducted sales analysis with Time series analysis and order forecasting for a large e-commerce platform with over 500,000 transaction records, including data cleaning, standardization, performance evaluation, seasonality analysis, baseline, and ARIMA model design.
- Participated in the data analysis for Cloud-based application development, including data ingestion via API and other sources, Lambda Trigger for AWS S3, database testing, and debugging

The University of Oregon, Eugene, OR
Graduate Researcher & Employee   Jun 2014 – Aug 2016
- Designed and conducted qualitative research for academic and educational purposes at the Center for Applied Second Language Studies (CASLS), (e.g., experimental design, ethnographic research, focus groups, grounded theory, case studies, surveys, interviews, etc.), such as the bilingual learner program to evaluate the correlation between the degree of bilingualism and cognitive development in the early years.
- Using Python and Tableau, analyzed quantitative research results, including learner behaviors and user experience, and developed insights to inform the stakeholders, such as the UO Linguistic Department faculty and Elementary and High Schools that are adopting our educational programs/products.
- Conducted in-depth data analyses using descriptive and advanced methods, integrating survey methodology and statistical analyses with qualitative design research.
- Supplemented design strategists from a methodological stance, and validated qualitative research findings using a triangulation of methods to ensure data validity and integrity.
- Supported and collaborated with a variety of teams to use research data to help align academic goals and priorities with user needs to support the department's strategic direction.
- Regularly reviewed scholarly literature on Applied Linguistics, Educational technology, human-centered interaction, design thinking, user research methodologies to strive for and maintain expert status.
- Developed online education programs, including the Bridging Project (A place-based hybrid interactive language learning program) and the Chinese Ecopod AR Game (A residential immersion program), by creating interesting storylines and developing website interfaces.

Dicai Accounting and Tax Control, Shanghai, China
From Financial advisor, IT department Manager, then Partner
2005 - 2014
- Conducted financial-related services consultations to clients.
- Led the development of the Sales and Tax Control Integrated Management Information System for small businesses.
- Oversaw statistical analysis for clients, assisted in developing campaign goals and objectives for stakeholders; instituted rigorous test-and-learn methodology to achieve desired results.