Sasha XiaoXia Deng
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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

IT Skills *(See Sheysia.github.io)*
Python, Javascript, Git, AWS S3, Testing & Debugging, Jupyter, Visual Studio Code, HTML, CSS, Web crawling, .Net, Unity, WordPress, Construct 3, Tensorflow
Business Intelligence
Data process and Database modeling, RDBMS, Data Pipeline, Data Miming, Data Cleansing, ETL, ELT, 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
Manager of Business Data and Programs   Apr 2017 - Present

- Set up and revise annual goals, budget plan, and objectives for each academic semester, independently create executive-level dashboards, reports, and views to board members and stakeholders, using Tableau (previously IBM Cognos analytics), on a regular basis, as well as for the most significant events including board meetings.
- Direct the actionable goals and strategies for the development of each site or program, identify business opportunities and challenges, and uncover potential business patterns, using Marketing Analysis, Customer Segmentation, Targeting and Positioning, Competition Analysis, Campaign Evaluation, FP&A, Budget Control with Gap Analysis, Time serials analysis, and Project management in the Aigle environment using Jira. 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.
- Migrate data from different sources, including Internal server, AWS S3, Json files from APIs, Google Analytics, the financial department, HR Department, Clover and other vendors, by using auto trigged data pipeline and ETL tools, on a regular basis, to actively evaluate the performances of different products and sectors;
- Conduct basic level of NLP, including the sentimental analysis using Python and Tableau, 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 the gradual switch from extract-transform-load (ETL) to ELT, Conduct the data governance and management; 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 the cost of customer acquisition, marketing channel, CLV, and sales strategies based on funnel analysis, to increase 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%.
- Took a major role in the development of the customized cloud-based CRM system, including both parent and student portals, to support the parents to track students' actions and performances, to conduct self-service or to submit tickets.
- Designed the database infrastructure to store datasets and grant access to different roles with credentials, and conduct data transformation and data migration. 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.
- 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.
- 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.
- Supported the development of educational applications and products, conducted app data analysis and A/B test, to track customer behaviors, increase the user experience and reduce the potential of losing new customers.
- Communicate with partners, and vendors, and interpret the business needs to the technical team or vice versa. Create detailed documentation in terms of business requirements and solutions.

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
- Participated in other data-related consultations with clients and stakeholders.

The University of Oregon, Eugene, OR

Graduate Researcher & Employee   Jun 2014 – Aug 2016
- Developed and participated in the testing of several educational applications and websites, on the basis of Unity, Construct, or .Net based, including the Bridging Project (A place-based hybrid interactive language learning program), the Chinese Ecopod AR Game (A residential immersion program), Games2Teach, Linguafolio, CALLM, Bridging Project, and so on. (See my portfolio)
- 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.

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.