XIAOQING KONG, PHD

SUMMARY

Highly analytical and detail-oriented data scientist with five years of experience in dealing with large-size data and using statistical methodologies and machine learning models to solve business problems.

- **Specialties**: Feature Engineering and Selection, Regression with Regularization, Random Forest, Support Vector Machine, Neural Networks, A/B Testing, Statistical Modeling, Experimental Design, Generalized Linear Model, Multilevel Modeling, Cluster Analysis, Time Series Forecasting, Principal Component Analysis, Structural Equation Modeling, Large-Size Data Management and Manipulation, Data Visualization, etc.
- **Technical Skills:** Python, R, SQL, STATA, Excel, PowerBI, Tableau, SPSS, SAS, HLM, etc.

PROFESSIONAL EXPERIENCE

MARLETTE FUNDING *(Fintech Company)* **NEWARK, CA & WILMINGTON, DE**

Marketing Data Analyst, Data Scientist ***Mar 2018 to Present***

Build targeting models, conduct a variety of marketing data analytics, and provide targeting strategies and forecast for direct mail channel; evaluate third-party data from multiple sources for potential introduction into production (Tools: Python, R, SQL, Excel, PowerBI, SAS, etc.).

- Develop targeting models and customer segmentation by using machine learning techniques
- Mine and analyze digital channel/web data to improve conversion through HEAP and Google Analytics
- Evaluate third-party data and introduce the data with add-on value into production for better targeting model development and customer segmentation
- Provide targeting strategies and forecast for every 8-million-mail-piece direct mail campaign
- Conduct a variety of analyses for direct mail channel, including A/B testing for creative design tests, seasonality evaluation, contributing factor decomposition, and digital channel-direct mail channel link analysis

HANOVER RESEARCH *(Consulting Company)* **SAN FRANCISCO, CA & ARLINGTON, VA**

Quantitative Research Consultant ***Mar 2016 to Mar 2018***

Senior Data Analyst ***Sep 2015 to Feb 2016***

Data Analyst ***Jun 2014 to Aug 2015***

Scoped and analyzed large-scale complex data and delivered insightful presentations and reports within short turnaround period for each project; handled difficult data projects with a variety of topics for education and enterprise clients; supervised data analysts on advanced quantitative analyses (Tools: R, STATA, Tableau, Excel, SPSS, etc.).

- Cleaned and compiled a large number of complex and large-size data files efficiently.
- Conducted appropriate statistical analyses to address clients' problems in a variety of topics, such as *program evaluation and college readiness predictive analysis for K-12 clients, matriculation prediction and enrollment projection for higher education clients, and sales forecasting, cluster analysis, and drivers of sales for enterprise clients*.
- Displayed results using data visualizations, such as interactive dashboards in Tableau and Excel.

- Wrote client-facing reports and presentations providing insightful recommendations.
- Devised new quantitative methodologies to solve clients' problems that were previously unforeseen in the company in a strategic manner. Applied advanced methodologies and data visualization approaches for the most challenging projects.
- Supervised data analysts to address clients' problems by using appropriate quantitative methods in education and enterprise practices.
- Communicated directly with clients to help with developing research questions of clients' interest, and creating quantitative methodology outlines.

UNIVERSITY OF VIRGINIA **CHARLOTTESVILLE, VA**

Graduate Research Assistant ***Jun 2010 to May 2014***

Worked on multiple quantitative research projects funded by the National Science Foundation, National Institutes of Health, and private foundations (Tools: SPSS, STATA, SAS, AMOS, HLM, Onyx, jMetrik, e!Sankey, NVivo, etc.).

- Applied various statistical analyses (such as logistic *regression, longitudinal analysis, principal component analysis, and structural equation modeling*) on large-scale data sets spanning a wide variety of ages and backgrounds of students; published and presented these research studies through journals and national conferences.
- Conducted analyses on each of the select nationwide data sets to prepare a memorandum to the Associate Director for Science in Office of Science and Technology Policy, Executive Office of the President. The report was concerning current situation of students' participation in all sorts of out of school time science related activities in the US.

EDUCATION

UNIVERSITY OF VIRGINIA **CHARLOTTESVILLE, VA**

Ph.D. Educational Statistics (in Context of Science Education)

- Dissertation: *Trajectory of Medical Students' Research Interest by Gender, Race/Ethnicity, Research Experience, and Program: A Longitudinal Analysis*

M.Ed. Research, Statistics and Evaluation

Relevant Graduate Courses: *Data Mining and Machine Learning, Experimental Design, Correlation and Regression, Multilevel Modeling, Multivariate Analysis, Structural Equation Modeling, Longitudinal Data Analysis, etc.*

HONORS AND AWARDS

- Excellence in Quantitative Research, Hanover Research (2015)
- Most Solution-Oriented Researcher, Hanover Research (2014)

SELECT PUBLICATIONS AND CONFERENCE PRESENTATIONS

Kong, X., Dabney, K. P., & Tai, R. H. (2014). The association between science summer camps and career interest in science and engineering. *International Journal of Science Education, 4*(1), 54-65. doi: 10.1080/21548455.2012.760856

Kong, X., Chakraverty, D., Jeffe, D. B., Andriole, D. A., Wathington, H. D., & Tai, R. H. (2013). How do interaction experiences influence doctoral students' academic pursuits in biomedical research? *Bulletin of Science, Technology & Society, 33*(3-4), 76-84. doi: 10.1177/0270467613516754

Wyss, V. L., Dolenc, N. R., **Kong, X.**, & Tai, R. H. (2013). Time on text and science achievement for high school biology students. *American Secondary Education, 41*(2), 49-59.

Kong, X., Tai, R. H., & Fan, X. (2014, April). *Parental involvement and students' science achievement: A longitudinal study*. Paper presented at the annual meeting of American Education Research Association, Philadelphia, Pennsylvania.

Kong, X., Almarode, J. T., Maltese, A. V., & Tai, R. H. (2014, March-April). *Activity-based science learning style preferences*. Paper presented at the annual meeting of National Association for Research in Science Teaching, Pittsburgh, Pennsylvania.

Kong, X., Tai, R. H., & Fan, X. (2013, April-May). *The relationships between students' perceptions of science and STEM career aspirations*. Paper presented at the annual meeting of American Education Research Association, San Francisco, California.