DOMINIQUE NIE

6010 Pershing Avenue, MO 63112 | 314-224-2407 | congnie@wustl.edu

PROFESSIONAL SUMMARY

Results-oriented data analyst and **Customer Analytics Master**'s Candidate skilled at developing predictive models and data analyses using cutting-edge statistical methods and analytical tools.

R, Python, SQL, Tableau, Spark, Pig, Hive, Hadoop, TensorFlow, NLP, Linear/Logistic Regression, Decision Tree, Random Forest, Boosting, Clustering, Neural Network, VBA, Advanced in Excel (Macro, Pivot, Solver)

EDUCATION

WASHINGTON UNIVERSITY, OLIN BUSINESS SCHOOL, St. Louis, MO   Aug 2019–Dec 2020
Master of Science in Business Analytics, FinTech Analytics Track; GPA: **3.66**/4.00; GMAT: 720 (Top **5%**)
ZHONGNAN UNIVERSITY OF ECONOMICS AND LAW, Hubei, China   Sept 2015–Jun 2019
BA, Economics, Concentration in Finance; GPA: **3.68**/4.00; Ranking: **7th**/165
HARVARD UNIVERSITY, DEPARTMENT OF ECONOMICS, Boston, MA   Jul 2017–Aug 2017
Economics Research Summer Program

WORK EXPERIENCE

BDA, *Business Analyst*, Beijing, China   Dec 2018–Mar 2019
- Facilitated approximately $30 million in prospective investment banking transactions by developing valuation models and conducting expert interviews
- Supported financial due diligence on firms in TMT, SaaS, Cloud Services and Healthcare sectors by participating in field survey, trend and structural analysis, and preparing meeting memos

Bank Of China Limited, *Credit Analyst*, Wuhan, China   Jun 2018–Aug 2018
- Estimated credit risk addressing $3.3 million investment exposure using VAR and control tables supported by +300 bank confirmation requests
- Detected and addressed $0.7 million in abnormal cash flows using advanced Excel techniques to analyze business background verification and manuscript production data

Industrial Bank Co., Ltd., *Financial Analyst*, Wuhan, China   Jun 2017–Jul 2017
- Built monthly dashboards and pitchbooks representing $200 million in potential transaction value by processing raw data for +100,000 clients using SQL and VBA
- Compiled and interpreted monthly forecast on construction relevant investment growth utilizing multiple linear regression concerning industrial performance via Stata

PROJECT EXPERIENCE

Taylor Community Consulting Program, *Consultant*, St. Louis, MO   Sept 2019–Dec 2019
- Provided the Greater St. Louis Area Council, Boy Scouts of America with a long-term impact assessment of participation in Boy Scouts educational programs on the participants' adult life quality
- Identified 4 key impacts and branched impact assessment based on INN variable search and stakeholder inputs
- Ran pilot survey via Qualtrics & MTurk and visualized findings using scaling and clustering methods in Python

NLP Kaggle Project, *Data Analyst*, St. Louis, MO   Oct 2019–Nov 2019
- Achieved 82% accuracy rate (Top 10%) in predicting the similarity between two unstructured groups of sentences
- Utilized Python Word2vec library to transform words into vectors and calculate Cosine, Jaccard and Manhaton distances. Utilized Python fuzzywuzzy library to obtain fuzzywuzzy ratio
- Combined basic features (word length, character length) with the distances and ratio to form the feature pool, then trained XGBoost model to give the prediction through k-fold cross validation

Gazetteer Project, *Data Scientist Associate*, Boston, MA & Wuhan, China   Jul 2017–Apr 2019
- Designed a socioeconomic database for 2,000 counties, 65 years and 120 variables with 55 research assistants
- Digitized, processed and visualized agricultural data from Charles database via R (dplyr, lubridate, ggplot2) and Python packages (NumPy, Pandas, Matplotlib, Seaborn) with 250 volunteers
- Fitted Logistic Regression via R to evaluate land transfer and expropriation channels in rural-urban migration

Bank Deserts Project, *Data Analyst*, Wuhan, China   Mar 2019–Apr 2019
- Testified a notable trend that in geographic areas with higher poverty rates, there was often a dearth of reputable banks or financial services. The shortage led to higher rates of financial victimization in these areas
- Utilized Python Requests library to make hundreds of API calls to the US Census, Google Maps and Google Places datasets. Utilized Python Pandas library to organize the retrieved information by zip code and socioeconomic factors
- Built scatter plots to easily communicate the Banking Desert phenomena in an easy-to-grasp format

ACTIVITIES / INTERESTS

- *Organizations*: Olin Big Data Association, Quantitative Finance Club, Wealth & Asset Management Club
- *Hobbies*: Texas Hold'em Poker, Chess, Photography, Piano, Composing, Rock Climbing, Swimming

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+1 (314) 224 2407 | congnie@wustl.edu

Jan 16th, 2020

Boeing Center for Supply Chain Innovation
One Brookings Drive
St. Louis, MO 63130

Dear the Boeing Center team,

I'm thrilled to learn of the Boeing Center Spring 2020 Practicum opportunity. With my **previous TCCP (Taylor Community Consulting Program) experience** and accumulated customer analytics/marketing/financial modeling practices combined with growing proficiency in Python, R and SQL, I am confident as a client-facing professional to add value to my team. I am excited about the prospect of working on various assignments and assuming roles of increasing responsibility. The following summarizes my experience as it relates to the responsibilities and missions:

Requirements	Dominique Nie's Qualifications
US experience dealing with local clients	**Taylor Community Consulting Program** – provide the Boy Scouts of America, an NGO based in St. Louis, with a long-term impact assessment of participation in Boy Scouts educational programs on the participants' adult life quality (1) Did strategic mapping for Boy Scouts and developed a rigorous framework for impact study (2) Discussed with David (Director of Marketing) and Ronald (Scout Executive) to identify four impact areas: Citizenship, Leadership, Character development, Fitness/Wellbeing (3) Branched further impact assessment based on INN variable search and stakeholder inputs (I suggested attending their board meeting) (4) Created pilot survey and ran that to +100 participants via Qualtrics (respondents were Scouts alumni) and MTurk (most respondents were non-Scouts) (5) I visualized findings using digitization, scaling and clustering methods in Python, and discovered a marketing insight: among the 3 Scouts youth educational programs, the Venturing program participants scored the highest in all the four impact areas, while its current participation rate is only 3.2%. Therefore, I recommended a marketing emphasis on the Venturing program for Boy Scouts and they were highly satisfied with our deliverables
Experience with Python, R and SQL for data analysis and statistical regression	- Built monthly dashboards and pitchbooks representing $200 million in potential transaction value by processing raw data for +100,000 clients using SQL and VBA - Supported "Gazetteer Project" by digitizing, processing and visualizing socioeconomic data of 2,000 counties from 1949 to 2014 via R (dplyr, lubridate, ggplot2) and Python packages (NumPy, Pandas, Matplotlib, Seaborn), together with 55 research assistants and 250 volunteers - Built Logistic Regression model in R to examine and compare respective channels of land transfer and land expropriation related to rural-urban migration, interpreted statistical results and proposed solutions to narrowing urban-rural development gap
Leadership experience with good teamwork and coordination skills	- Honored as "Outstanding Team" (Top 1%) in Financial Hot Spot Debate Contest by leading highly efficient group discussions, making progress check with teammates, and connecting closely to domain experts - Won National Collegiate Case Analysis Competition by leading and facilitating generation of analytical report for insurance industry with strategic positioning suggestions, nurturing and growing positive relationships with company's existing clientele and business partners

I hope to contribute my **leadership**, **business acumen**, **analytical rigor**, and **quantitative mindset** to the Boeing Center Practicum project**.** I can be reached by cell phone at 314-224-2407 and via email at congnie@wustl.edu.

Sincerely,

Dominique Nie

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