# **Qiang Ling**

# Data Scientist - Coca-Cola Freestyle R&D

Marietta, GA - Email me on Indeed: indeed.com/r/Qiang-Ling/1db899ac62d258f7

#### WORK EXPERIENCE

## **Data Scientist**

Coca-Cola Freestyle R&D - Atlanta, GA - June 2014 to Present

Conducted pattern recognition using various data sources, including Coca-Cola

Freestyle dispenser log and beverage consumption matrics; assisted leadship team in making decisions through machine reliablity analysis, provided timely resolution to field incident response process;

- Given business long-term needs, coordinated the expansion of Freestyle sysdb log system with additional new log content and infrastructure, and to expand log system across platforms.
- Designed and conducted various studies, such as studies of Coca-Cola Freestyle dis-penser calling home rate, analyzed dispenser health status; analyzed Freestyle beverage consumption trends. Provided high level statistics in Monthly Operation Reports for Coca-Cola Freestyle leadership meetings;
- Implemented various statistical methods, such as student t-test, paired sign test, bayesian statistics, bootstraps resampling methods, statistical regressions, in supporting Coca-Cola Freestyle engineering and Operation management teams; facilitated data analysis and interpretation;
- Conducted Freestyle reliability risk tests, validated machine behaviors through reliabil- ity tests in the lab and quantified fleet performance in the field.
- Proficient in SQL, Amazon Redshift clouds Computing and Business Intelligence (BI) tools, such as Splunk queries searching machine log data, and Proficient in MicroStrategy in analysis of beverage consumption data.

# Statistical Consultant

Equifax Inc - Alpharetta, GA - February 2013 to May 2014

Worked with credit file raw components/trades to create attributes, tested attribution significance through different statistical models. Developed attribute specifications for the various data sources. Performed analyses to determine value and stability.

- Provided statistical consultation to modeling automation and model validation pro- cess. Ensured quality deliverables of developed attribute solutions. Created detailed
- documentation outlining design and technical specifications of each modeling solution.

   Manipulated large amount of data and integrated diverse data sources into solutions.

Worked with Product Managers and customers on the formulation of credit attribute solutions.

 Contributed to process improvement initiatives within Analytics group. Performed QA/audits surrounding implementation of products and analytic solutions.

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## **Statistician**

The Centers for Disease Control and Prevention - Atlanta, GA - February 2003 to February 2013 Contractor.

- Performed Statistical Analyses of HIV/AIDS infection rate with confidence interval by taking into account the uncertainties in the estimates adjusted for reporting delays and for missing transmission risk information by Confidence Interval calculation;
- Conducted statistical analyses of Estimated Annual Percentage Change and confidence interval of incidence and rates (per 100,000 populations) of HIV/AIDS epidemic by using U.S. National HIV/ AIDS Reporting System (HARS).
- Conducted time to event analyses to identify determinants of survival after a diagnosis with HIV or AIDS and determinants of disease progression from a diagnosis with HIV to a diagnosis with AIDS;
- Conducted Bayesian Spatial-temporal hierarchical modeling of lung and bronchus cancer for Colorado and Georgia data in R and WinBUGS, submitted results to conference in abstract, resolved Colorado boundary change (due to Bloomfiled, a newly-generated

Colorado county by the end of 2001) issue using Spatial misalignment technology.

Developed bayesian short-term projection of cancer incidence at County level, and the results projected cancer incidence were compared with the actually reported cases.

Conducted cancer incidence trend analyses using SEER\*STAT for CDC's National
Program of Cancer Registries (NPCR); Implemented and promoted usage of Joinpoint
regression within Cancer Surveillance Branch (CSB) in estimating age-adjusted cancer
incidence rate changes. Conducted cancer incidence rate trend analyses of variety of cancer sites; Conducted
data quality control through comparison with results from
National Cancer Institute (NCI);

 Monitored and provided technical support to statistics methodology development project "Cancer Case Reporting Delay and Reporting Error Correction Adjustment with Application to National Program of Cancer Registries (NPCR)", a task order assigned to an external contract company. Conducted literature review on current research advantages in adjusting reporting delay/reporting error correction in SEER data and delay adjustment in HIV/AIDS surveillance data as well. Been involved in writing statistical section of the final technical report.

# **Statistical Programmer**

Eli Lilly & Company - Indianapolis, IN - October 2001 to February 2003

Contractor.

 Working as a Statistical Programmer with a product team in Phase III trials, including some experience with Phase I and Phase II (ECG study). Supported for ISS (TESS and SAE) and ISE regulatory response to assist NDA submission and publication.

Therapeutic areas: Erection Dysfunction.

- Developed complicated Statistical Models, including mixed model and logistic regres- sion, to analyze large data, by using SAS/PROC GENMOD and PROC MIXED for repeated measurement and longitudinal data. Supported senior Statisticians in Ad hoc analysis, publications and conference presentations Validated and peer reviewed Final Study report.
- Provided graphics, tabular and written summaries of analysis in a form suitable for inclusion in manuscripts as well as for presentation at scientific meetings. Calculated Relative risk with 95% confidence interval, odds ratios with 95% confidence interval (exact test method)., Cochran-Mantel-Haenszel(CMH) test, Chi-square Test, Fisher exact test, and Breslow-Day test.

# PhD Dissertation

Title Bayesian Spatio-Temporal Models for Cancer Incidence Rates
Supervisor Howard H. Chang, Assistant Professor at Emory Biostatistics Department

Description Bayesian Spatio-Temporal hierarchical Poisson models were developed for estimating and projecting Cancer incidence rates with application to the National Program of Cancer Registries. Overdispersion due to zero-inflation were accounted using zero-inflation Poisson (ZIP) Mixture model, and k-ZIP model for extremely rare cancer.

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# **EDUCATION**

# **PhD** in Biostatistics

Emory University - Atlanta, GA 2014

## M.S. in Biostatistics

University of Massachusetts - Amherst, MA 2002

## **Bachelor of Science**

Xiamen University - Xiamen, CN 1993

## **SKILLS**

MICROSTRATEGY (3 years), SPLUNK (3 years), SAS (1 year), Serial Attached SCSI (1 year), C++ (Less than 1 year)

#### ADDITIONAL INFORMATION

Computer skills
Basic FORTRAN, HTML, C++
Intermediate Matlab, Perl, Latex, Lyx, Microstrategy
Expert SAS Splus/R SPSS STATA WinBUGS Splunk
Miscellaneous Windows, Unix, Linux, Office

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