## **ENKELEDA KATIE ÇUKO**

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#### **EDUCATION**

- Ph.D., (A.B.D), Department of Mathematics and Statistics; State University of New York, Albany, NY
- M.S., Biostatistics, School of Public Health; State University of New York, Albany, NY 2006
- B.S., Mathematical Statistics; State University of New York, Magna Cum Laude, NY 2004

## **QUALIFICATIONS / SELECTED SKILLS**

- Over ten years as a senior statistician with a strong passion for turning large data into actionable insights that drive improved performance. Strong critical thinking skills and a very high aptitude for empirical research and for answering hard questions with data.
- Proven experience in statistical analysis and modeling including the following: Bayesian
  Hierarchical Models, Bayesian Dynamic Linear Model, Linear/Logistic/Poisson Regression,
  Multinomial/Multivariate Regression, Non-parametric Classification Regression Trees (CART),
  Bagging, Boosting, Random Forests, LASSO Regression, Time Series Analysis, and ARIMA models.
- **Programming experience** such as Html 5/CSS 3, SQL, VBA including Excel Macros and extensive use of standard software which include; Word / Excel / Access / PowerPoint.
- Programming and usage of statistical software such as R Studio / SAS / S+ / Mathematica / WinBugs/Tableau.
- Multilingual; Albanian / English / Greek / Italian.

#### **EXPERIENCE**

### Data Analytics Manager with Karl Heiner Statistical Consulting, Ltd, May 2014 - present

- Manager of junior level analysts.
- Evaluate and modify statistical methodologies, techniques and processes.
- Project management of various analytics projects such as, monitoring quality metrics having to do with hospital/HMO incentives for Medicaid reimbursements. (HIV, SEPSIS)
- Audit statistical analysis for accuracy.
- Production of website dashboards. (SEPSIS)
- Elicitation of clients' strategic goals to identify metrics in analysis aligned with their business strategies. (AMEX Bank)

# **CEO / Statistician** - Enkeleda Çuko Statistical Consulting, Ltd, December 2011 – present

- Statistical analysis and design of experiments of health outcomes for Health Care Quality and Outcomes data. (NYS DOH AIDS Institute)
- Design statistical models such as Bayesian Dynamic Linear Models and different ARIMA models to address resource allocation. (AMEX Bank)
- Develop models for categorical data including hypothesis testing, classification trees and Bayesian Hierarchical model prediction. (NYS DOH AIDS Institute, NYS OMIG, AMEX Bank)
- Analysis for modeling of data produced by experimental design and administrative data systems.
   (Connecticut Hospital Association, NYS OMIG, US HHS, CMS, AMEX Bank)

- Access large databases (e.g. SAS database) located in government and private sector data warehouse. (AMEX Bank, CMS, NYS OMIG)
- Assist in conducting the assessment study at SUNY New Paltz.

## <u>Senior Statistician</u> with Karl Heiner Statistical Consulting Ltd, March 2007 – present

- Develop statistical models and sampling plans for monitoring quality of health care including HIV therapies and cancer treatments. (NYS DOH AIDS Institute).
- Monitoring the risk associated with the longitudinal data using Bayesian Dynamic Linear Models, DLM. (AMEX Bank).
- Implementing statistical approaches and methodologies.
- Interpreting and communicating analytics results.
- Organize data and apply different data analysis methods using SAS, R, S+, WinBugs, and Mathematica.
- Prepare reports on data manipulation and data analysis including tabular and graphical representations.
- Studies to ensure data reliability. (SUNY at New Paltz, NYS OMIG, NYS DOH AIDS Institute).

## Statistical Analyst with Market Certitude, L.L.C. – Morristown, NJ, March 2006 – March 2007

- Responsible for designing, programming, analyzing, and executing various statistical models for all market research projects. These statistical models included but not limited to multiple/multivariate regression models, Bayesian Hierarchical Clustering model, nonparametric regression trees. (AstraZeneca, Roche, Pfizer, Bristol-Myers Squibb)
- Evaluated and recommended the most appropriate statistical methods for various market research projects. (AstraZeneca, Roche, Pfizer, Bristol-Myers Squibb)
- Assisted in the development of research proposals including conducted background research and recommended sampling design and sample size.
- Assisted in the implementation of all phases of market research projects including questionnaire development, fieldwork needs and specifications, data collection and data processing, analysis of results and report writing.
- Responsible for maintaining an up-to-date knowledge of the pharmaceutical industry and good working knowledge of the key issues relevant to assigned projects.
- Communicated with clients, identified the problems promptly, and presented recommendations on corrective actions for approval. (AstraZeneca, Roche, Pfizer, Bristol-Myers Squibb)

#### **COLLEGE PROFESSOR**

- Visiting Professor of Quantitative Business Analysis Siena College, Loudonville, NY, September 2015 June 2016.
- Adjunct Professor of Statistics State University of New York-New Paltz, August 2013 December 2015.
- Teaching and Research Assistant in Statistics State University of New York New Paltz, NY, January 2002 May 2013.

#### RESEARCH

- Interpreting interactions among risk factors in HIV suppression, ASA Women in Statistics, NC, 2014.
- Cold-Deck and Multiple Imputation vs. Bayesian Model for quality of care indicators, Graduate Project, SUNY Albany 2010.
- Cardiovascular mortality and pollution particulates in Los Angeles, Graduate Project, SUNY Albany, 2009.
- C-section birth and asthma in children, Master's Project, SUNY Albany, 2006.
- Research SAS Analyst / Internship New York State Department of Health Albany, NY, October 2005 May 2006: Conducted and summarized literature reviews of existing best practices on specific public health issues and strategies; assisted in the development of data collection and program evaluation tools; assisted in collecting and analyzing data using SAS, from contractors and other target audiences; conducted statistical analysis using ICHIS dataset and proposed recommendations for preventing asthma in children.

#### **CONTINUING EDUCATION**

- Regression Modeling Strategies, Joint Statistical Meetings, NY 2003
- Bayesian Analysis Using Gibbs Sampling, Cambridge University, UK 2006
- Non-parametric Bayesian Methods, Moncalieri University, Italy 2008
- Bayesian Hierarchical Models, University at Pennsylvania, US 2011

### **AFFILIATIONS**

- American Statistical Association ASA, Member (2002 present)
- International Society for Bayesian Analysis ISBA, Member (2007 present)
- International Biometric Society IBS, Member (2007 present)
- United States Tennis Association, USTA, Member (2008 present)

### **PERSONAL INTERESTS**

- Competitive tennis, golf, boxing, hiking and swimming.
- Archeology and travelling.
- Cooking, especially Mediterranean dishes.