Iuliana Teodorescu

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EDUCATION

Ph. D. in Statistics, University of South Florida, Tampa FL, 2009 – 2013
Ph. D. Program in Statistics, University of New Mexico, Albuquerque NM, 2006 – 2009
M. Sci. in Statistics, Northern Illinois University, DeKalb IL, 1999 – 2001
M. Sci. Program in **Computer Science**, West Virginia University, Morgantown WV, 1998 – 1999
B. Sci. in Physics, "Al. I. Cuza" University Iasi, Romania, 1991 – 1996

APPOINTMENTS

2014 –	Research Assistant Professor, Dept. of Mathematics and Statistics at USF
2012 – 2013	Graduate Assistant, Department of Mathematics and Statistics at USF
2001 – 2004	Data Analyst for R&D, Information Resources Inc., Chicago IL
Jan 2000 – June 2001	Graduate Teaching Assistant, Northern Illinois University, DeKalb IL
1998 – 1999	Graduate Teaching Assistant, West Virginia University, Morgantown, WV

AWARDS/FELLOWSHIPS

- Pi Mu Epsilon Mathematics Honor Society, Florida Chapter

PROFESSIONAL AFFILIATIONS

- *The American Statistical Society, The American Mathematical Society, The Society for Industrial and Applied Mathematics, The Association for Women in Mathematics, The Mathematical Association of America*

STATISTICS CONSULTING PORTFOLIO

- Information Resources Inc., Chicago, IL (2001 - 2004): Investigated trends using statistical analysis and built research tools for pattern detection. Significantly enhanced data reliability by increasing the efficiency of quality control techniques. Used regression analysis and GLM methods to build robust predictive models.

- Wrote internal technical reports on baselining, imputation, trend and pattern detection.

- Six Sigma DMAIC Training, Project Management, UNIX, VMS, ORACLE PL/SQL, SAS Macro.

- Statistical Consulting Laboratory, Northern Illinois University (2000 - 2001)

SERVICE/OUTREACH ACTIVITY

- Research mentor, USF STEM 2014 program, advising the student Pranav (Raj) Warman, project: "Efficient algorithms for topological inference on random graphs", first prize in Senior Mathematics, Florida STEM State Fair, March 2015.

- Reviewer/referee for: *Advances in Analysis and Mathematical Physics, Journal of Stochastic Analysis and Applications.*

- 2016–2018: Center for Complex Data Systems computer laboratory committee (ad hoc).

- 2017–2018: Departmental library committee.

PUBLICATIONS AND SOFTWARE PRODUCTS

SOFTWARE PRODUCTS (GITHUB/USF-CCDS/CODING-SOLUTIONS)

- UK-CPG data: Rule-based pattern detection tools implemented in SAS and C

- Moving-average outlier detection procedures for datasets with cyclical trends (SAS Macro)

- Oracle/SQL implementation of relational databases integrating large categorical data sets

ARTICLES

1) "Maximum Likelihood Estimation for Markov Chains", arXiv:0905.4131 [stat.CO], submitted to the SIAM Journal of Uncertainty Quantification.

2) "Connectivity inference in random network models" (with R. Teodorescu), accepted in Spatial Connectivity Workshop at IEEE Big Data 2014.

3) "Optimized surrogates for Kaplan-Meier maximum likelihood estimators", submitted to the ASA Oxford Journal of Survey Statistics and Methodology.

4) "Efficient algorithms for topological inference on random graphs", (with R. Teodorescu and P. Warman), http://arxiv.org/pdf/1512.09193.

IN PREPARATION

5) "Factorization of generating functions as classifiers of random graphical models", (with R. Teodorescu and P. Warman),