



**The University of Chicago**  
**Department of Statistics**

**Master's Seminar**

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**Analysis of Patent Liability Claims Data  
Using Generalized Linear Models**

**WEDNESDAY, November 19, 2008 at 2:00 PM**  
**110 Eckhart Hall, 5734 S. University Avenue**

**ABSTRACT**

Generalized linear models (GLMs) have become very popular techniques in insurance and risk management. In this paper, GLMs are used to model the patent liability claims data from Arthur J. Gallagher Risk Management Services to study the relationship between the company size and the amount of patent infringement claim against it. Specifically, multiple linear regression models are used to analyze the relationship along with the effects of resolution and industry. Coefficients of risk predictors are estimated using OLS estimator. The results showed impressive effect of the company size in terms of revenue on the amount of claim hold against it. And the results suggest that larger companies are encountering large amount of claim because they are willing to take bigger risk. Additionally, average amount of claims can be predicted using the final regression model.