# **Helen Corns**

# Research Associate, Center for Injury Epidemiology - Liberty Mutual Research Institute for Safety

Framingham, MA - Email me on Indeed: indeed.com/r/Helen-Corns/a7c5927bcf735878

Data analyst with 10 years of experience, expert in using SAS, R and Python, and familiar with SQL. Experience analyzing, interpreting and presenting complex data analysis results to stakeholders of varying backgrounds. Focused on machine learning methods for natural language processing and text mining with large datasets. Experienced with Microsoft Office suite, database creation, database management, data cleaning and literature review.

Willing to relocate to: MD - Washington, DC - VA Authorized to work in the US for any employer

#### WORK EXPERIENCE

### Research Associate, Center for Injury Epidemiology

Liberty Mutual Research Institute for Safety - Hopkinton, MA - 2006 to Present

- \* Analyzed natural language data using machine learning techniques in text mining, particularly using Bayesian, Logistic Regression and Support Vector Machines to assist automated categorization of narrative text. Investigated and employed unsupervised methods for topic modeling.
- \* Prepared queries to obtain claims data and assembled large insurance claims datasets merging data from different sources to obtain estimates of the burden of different workplace injuries using SAS.
- \* Disseminated study findings/results and provided statistical support for research projects, reports and presentations.
- \* Assisted with Internal Review Board (IRB) applications for projects and preparation of internal project proposals.
- \* Co-authored scientific publications on the subject of automated classification of narrative text data

#### **Research Assistantship**

Quantitative Analysis Unit - 2004 to 2006

- \* Used SAS to produce descriptive and analytic results for several studies, working with various large public data sets: National Health Interview Survey (NHIS) & Bureau of Labor Statistics (BLS) datasets, among others.
- \* Investigated ladder fall injuries in the work place, including data analysis and development of coding systems.

#### Medical Technical Officer, Royal Wolverhampton Hospitals NHS Trust

New Cross Hospital - Wolverhampton - 2003 to 2004

- \* Carried out system administration and development of the clinical information systems provided to the Renal Unit.
- \* Maintained the Renal Unit database system, compiling complex data, patient related audit and statistical information, involving participating in the collation of patient clinical data for Birmingham Primary Care Shared Services Agency & UK Renal Registry.

# Software Design Engineer and Testing Engineer, Professional Mobile Radio Division Nokia - Cambridge - 1999 to 2002

\* Developed software as part of multi-site (UK and Finland) projects for real-time, embedded software platform. Gained experience in all stages of the software life cycle, from specification through to testing.

- \* Documented specifications and implementation descriptions and organized reviews of documents across sites.
- \* Planned, wrote and executed test plans and analyzed test results to investigate and locate problems, clearly documented and presented progress reports for presentation to other teams.

#### **EDUCATION**

## M.S. Public Health in Biostatistics & Epidemiology

University of Massachusetts - Amherst, MA 2006

### M.Eng. in Electronic and Electrical Engineering

University of Birmingham - Birmingham 1999