29 September, 2016

Independent Study Proposal

**AU-2016** W/ Dr. benjamin Althouse

HEALTHCARE COST AND UTILIZATION PROJECT

Abstract:

HCUP is the Nation’s most comprehensive source of hospital data, including information on inpatient care, ambulatory care, and emergency department visits. HCUP enables researchers, insurers, policymakers and others to study health care delivery and patient outcomes over time, and at the national, regional, State, and community levels. We have collected hospitalization data in the state of Washington for the past 3 decades, the idea is to model interesting relationships and gain valuable insights with cutting edge research.

Learning Objectives:

• Expertise in data wrangling and cleaning

• Mastering exploratory data analysis techniques

• Using Machine learning algorithms and writing production ready code in R.

Activities:

• Bi-weekly progress meetings with Professor

• Deliverables defined for each meeting

Deliverables:

• [Doc] Weekly progress report describing completed and ongoing work

• [Code] Weekly programming and visualization deliverables

• [Doc] End-of-quarter summary report

Evaluation Criteria:

• Attendance of all research meetings

• Submission of weekly report at 12AM on the day of meeting

• Completion of weekly minutes of meeting summary by 9PM on the day of meeting

• Quality, efficiency and organization of code (with comments)

• Quality of Weekly “work completed” deliverables

• Quality of final report to be submitted at the end of the Quarter.