**Project Proposal**

**Name:** Guan Yue Wang

**Title of Paper:**

How can social media inform marketing strategies for life insurance sales?

**Research Question (Briefly state your research question/thesis of the paper):**

- What are the key factors driving life insurance purchase decisions from the customer perspectives?

- What are some influential tools and approaches being for digital marketing.

**Target Venue Website**: SBP-BRiMS

**Why do you think this is an appropriate venue for your paper**?

The paper concentrates on public opinion representation and studies of purchasing behaviors through social media analysis which fits well with venue’s focuses

**How was your data obtained/collected?**

-Potential buyer’s data is collected through Reddit data. As there’s no available community for life insurance, PersonalFinanceCanada reddit community is identified as a good source to collect people’s comments with filtering in place to extract life insurance related posts

-Company’s marketing campaign text data is collected through twitter hashtag #lifeinsurance

**What advanced analytic methods will you use?**

- Data collection through Reddit and Twitter API

- Text Pre-processing to clean the text data with tokenization lemmatization and stop word removal

- Sentiment Analysis to split text data into positive and negative sections in order to identify key words/factors related to both positive posts versus negative sentiments

- N-gram language model to identify popular words/short phrases in positive and negative posts

- Topic Modeling to identify key topics people discuss in the reddit and twitter posts

- Network analysis and Graph theory: in addition to overall research, it would be interesting to visualize the network graph to see the density of the community as well as pick a couple of high degree nodes (i.e. social influencer) to conduct above analysis on their comments separately.

**Why will someone want to read your paper?**

It is expensive and time consuming to conduct a good survey to understand the driver for life insurance purchase. Therefore, text mining on social media data would be a great approach to reveal some of the important factors impacts people’s purchasing decisions as well as evaluate if companies’ marketing campaigns effectively captures these drivers.