To: Industry Leaders in Tech
From: Haoran Zheng, Kevin Jiang, Austin Lutterbach
Re: Proposal to Explore Mental Health Care Solutions in Tech Industry
Date: October 4th, 2020

In this memo, we highlight a topic of concern that is relevant to various industries: mental health. Given how broad of a topic mental health is, we feel that it is more fruitful to focus on one specific industry; that is we aim to explore the implications of mental health in the Tech industry, specifically related to identifying sufferers of mental illness.

In the **Background** section, we will outline the problem we want to explore and set the scene for our project. We clearly state our objective in the **Objective** section. Then under **Dataset**, we take a quick dive into what the data looks like and what aspects of it we hope to use. Finally, we will elaborate on why this topic should be explored and for what purpose under the **Business Implications** section.

I. Background

The 'crunch' environment, pressure to meet deadlines, and fear of failure are just some of the stressors that affect professionals in the Tech industry. Although issues of stress are by no means unique to the Tech industry, there has been an increasing interest in identifying and supporting stressed tech workers in recent years [2].

However, despite such progress, many people who need help for a mental issue do not seek it. In fact, a study by the World Health Organization [1], found that between 30 and 80 percent of people with mental health issues do not seek treatment. If these people can be readily identified, health organizations or tech companies can more easily provide necessary resources for these people of interest.

II. Objective

Our project attempts to build a classification model which can recognize people who suffer from mental health issues but do not seek treatment.

III. Dataset

The data set is from a 2014 survey launched by Open Sourcing Mental Illness (OSMI) that measures attitudes towards mental health and frequency of mental health disorders in the tech workplace. With over 1200 responses, the data set covers over 25 variables, from demographic information to employment information. We believe that the variables and data set are relevant enough to build an effective machine learning model as proposed in our objective.

IV. Business Implications

Even though many Tech Giants provide mental health support for their employees, such as Amazon Mental Health Care Program, whether employees who need help actually go to the care center still remains unknown. Thus, by building a sophisticated machine learning model that can identify this population of people, businesses may be able to (i) provide the adequate mental health resources that its employees deserve, and (ii) increase workplace productivity, thereby eliminating millions of dollars otherwise lost with ineffective work hours.

References

[1] Wang et al. "Use of mental health services for anxiety, mood, and substance disorders in 17 countries in the WHO world mental health surveys". In: *The Lancet* (2007).

[2] Christian Murphy and Jennifer Akullian. "We're All in This Together: CS Students, the Tech Industry, and Mental Health (Abstract Only)". In: SIGCSE '18 (2018), p. 1071. DOI: 10.1145/3159450.3162189. URL: https://doi.org/10.1145/3159450.3162189.