# Abstract-250 words

Mental illness is a disease that is gaining increasing awareness and acceptance as a legitimate health issue. One organization, Open Sourcing Mental Illness, is focusing particularly on mental illness in the tech community. In 2016, it completed a survey with 1400 respondents from the tech community that answered a wide variety of questions about their mental health, their employment benefits and offerings, and other demographic and related information. Our team used this data set for our project. After cleanup and transformation of variables, we built a model to predict whether an individual would seek professional mental health services using data submitted in the survey. We built several models with differing sets of variables, but noted several important commonalities in predicting the seeking of professional mental health help. In particular, an individual was more likely to seek help if their employer offered mental health benefits, if the employee was well informed about the options offered by the employer for treatment, if anonymity could be maintained when using mental health or substance abuse treatment resources, and if the employee believed mental health to be negatively affecting work productivity.

# Keywords

Mental illness, modeling, prediction, survey, technology

# Introduction

Open Sourcing Mental Illness is a non-profit organization that focuses on “raising awareness, educating, and providing resources to support mental wellness in the tech and open source communities” (<https://osmihelp.org/about/about-osmi>). It began in 2013 when Ed Finkler, a life long sufferer of mental illnesses, began speaking at tech conferences about his experiences with mental illness. Due to the positive response he received, he has continued to speak and research on mental illness in the tech community and to advocate for open discussion and support for those suffering from mental illness.

As part of Finkler’s research, several surveys have been conducted relating to mental health in the tech industry. A 2014 survey had 1200 responses and focused generally on mental health in the tech industry (https://osmihelp.org/research). A 2016 survey had 1400 responses and focused on “attitudes towards mental health in the tech workplace” (<https://osmihelp.org/research>). At the time of this writing, a 2017 survey was still in progress.

Given Finkler’s desire to foster an open discussion about mental illness in the workplace, the raw survey data mentioned above is available. Our team decided to use the 2016 survey data for conducting our analysis. It can be downloaded from an associated Kaggle site (<https://www.kaggle.com/osmi/mental-health-in-tech-2016>).

Here are some quick facts related to mental illness in the tech industry: (<https://osmihelp.org/talks>)

* About 1 in 5 people experience mental illness in population at large
* 60% of 1400 respondents to survey had sought treatment for mental health conditions
* 50% pf 1400 respondents to survey had been diagnosed with a mental illness
* “High-pressure companies” have health care expenses 50% greater than others
* “60-80% of workplace accidents are attributed to stress”
* “Over 80% of doctor visits are stress-related”
* More days of work are lost due to mental illness than other chronic conditions like asthma, arthritis, back pain, diabetes, heart disease, and hypertension
* Over 70% of costs associated with mental illness are found in indirect costs of absenteeism, presenteism (at work but not full productive), turnover, and training costs for replacing workers

Why does this matter? To quote, “employees work harder when they are happy, and happy employees leads to less turnover, which ensures that operations run more smoothly” (https://osmihelp.org/talks). That is, there is a strong business case for addressing mental health in the workplace and providing support and medical care to those suffering from mental illness. Such care and support creates a more productive and positive environment, and ultimately helps a company save on costs.