More than any time in history, we are dependent on the internet to live our everyday life and get our work done. We are surrounded by myriad information every day and it becomes increasingly hard to evaluate the quality and truthfulness of each piece of information as we digest them. Since how we see the world and others is heavily influenced by the information we received, it is likely for some people to form certain beliefs that are not supported by sufficient evidence. Conspiracist ideation – belief in conspiracy theories – is a typical example of such beliefs. People endorsing conspiracy theories tend to explain an event or situation by invoking a conspiracy by sinister and powerful groups, often political in motivation, when other explanations are more probable (Brotherton et al., 2013). A number of studies investigating conspiracy beliefs find that conspiracy beliefs do not result from rational evaluation of the evidence related to each specific conspiracist claim; rather there seems to be stable individual differences in the general tendency to engage with conspiracist explanations for events (e.g., Goertzel, 1994; Swami et al., 2010, 2011, 2013; Wood et al., 2012). Findings suggest that there are relationships between conspiracy beliefs and personality traits and cognitive styles, but they are limited in robustness and strength (see Swami et al., 2010, 2011, 2013; Swami and Furnham, 2012). If conspiracy beliefs and personality traits and/or cognitive styles are indeed related, it is plausible to predict one from the other. For this project, I would like to use machine learning approaches to try making prediction on conspiracy beliefs from personality traits. I will investigate the effects of personality traits and demographic information (e.g., age, gender, education, major), separately, on predicting conspiracy beliefs. The dataset I will use was collected by Open Psychometrics, through an interactive online version of the Generic Conspiracist Belief Scale (GCBS; Brotherton et al., 2013) in 2016. It contains 2495 responses (rows) and 72 columns, comprised of 15 items from GCBS, time spent in answering the questions, 10 items from a brief measure of the Big Five Personality Domains (Gosling et al., 2003), 16 items for validity check, and a bunch of questions related to demographic information. I intend to utilize both parametric (e.g., logistic regression) and nonparametric (e.g., decision trees) models, and compare their prediction performance.