

## **Project Summary**

Modern digital mailboxes receive an influx of malicious, bothersome, or legitimate email. Our AI filter MailSift is designed to automatically allow and deny emails on the contents or type of the email and the behavior of the user. The AI uses a Random Tree Ensemble to classify email.

## **What Has Been Accomplished So Far**

- Training the AI model to identify spam email using examples from the UCI spambase.
- Implemented K-Nearest Neighbors, Random Tree Ensemble, and Naive Bayes. Determined that Random Tree Ensemble performed best; although Naive Bayes may perform better. Require further parameter tweaking.

## **What Has Fallen Behind**

Our AI model shall be able to determine bothersome (but non-malicious) email, such as notifications from connected social media applications or promotions. This must be determined from our own email inboxes and behaviors. Extracting this data in a usable form is challenging.

## **Any Project Changes**

Our AI technique may be changed to Naive Bayes. We must further experiment with parameter tweaking.