

Factors Which Predict Future User Adoption

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“Relax, Inc.” Take-home Assignment

Factors which predict future user adoption, in order of importance:

1. Belonging to an organization with a higher percentage of adopted users
2. Being invited by an adopted user
3. Having an @hotmail.com email address
4. Signing up through Google Authentication or through a guest invite
5. Being opted in to the mailing list
6. Having a @gmail.com email address

Factors which were found to predict a user *not* becoming adopted:

1. Creating an account for personal projects
2. Having an @yahoo.com email address
3. Having a higher number of users in their organization
4. Being invited through their organization

Approach: Adopted users were defined and labeled in the users table based on entries in the logins table. I derived some additional features, including the number of users in an organization and how many were active, whether a user was invited by an active user, and whether a user had invited other users and whether or not *they* were active. I fit the scaled & encoded data to an XGBoosted Tree Classifier and then found the SHAP values associated with each feature. SHAP values are plotted below for review.

