

Modeling Signals in BYU Dating

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For this project I propose modeling the relationship between signals and interest in dating. One of the greatest challenges in dating is interpreting the signals that the other person is sending and deciding if they are trying to show interest. Despite numerous counseling sessions with my roommates, we have not been able to establish fixed rules. In one case a sign is obviously used to show interest while in another we are baffled to discover that she was not trying to show interest. Surely there must be patterns that exist which are more elusive than can be discerned with our own experiences. We need data. Assuming we can gather enough data, a machine learning model could be perfect for this because it would be able to discover relationships that are not immediately obvious. We could then use this model to provide a more educated analysis of future situations.

I suspect that interest in a person will be evident in what someone does as well as what is happening in their life. People tend to act differently around someone they like. They also may be less interested in dating someone if their life is particularly stressful. Here is a potential feature set in no particular order:

How many months since your last relationship?	On a scale of 1-10 how busy are/were you?	How often do you get food with this person?	Have you given this person backrubs?	Have you shared playlists with this person?	How many semesters have you been at school?	Are you a returned missionary?	Do you plan on going on a mission soon?
20	8	3	No	No	7	yes	no
Would this be a long-distance relationship?	How many dates have/had you been on with this person?	Do/Did you tend to make eye-contact more than normal?	How often did/do you perform acts of service for them?	How many hours do/did you spend with them in a week?	How many dates do/did you get asked on in a month?	Do/Did you frequently make jokes around this person?	How many times did you ask someone on a date in a month?
no	1	Yes	6	2	0	Yes	2
Do/did you have a job?	Have you Kissed them?	Do you tend to touch their arm?	Do you tend to touch their shoulder?	Did/Do you text first?	Have you held their hand?	Have you cuddled with this person?	Have you asked them on a date?
Yes	No	No	No	Yes	No	No	yes
How often do/did you attend activities you knew they would be attending or might be attending?	How frequently do you find yourself lingering when they are there?	How frequently do/did you interact with them in a week?	How frequently do/did you invite them to do something with you?	How often do/did you find yourself laughing around this person?	Do/Did you try to sit next to them at church?	How frequently do/did you always like their posts or comment on their stories?	<u>Are/were you interested in this person?</u>
8	5	2	4	5	Yes	0	<u>Yes</u>

The most significant challenge of this project will be acquiring the data. Because I think it is unlikely that I would find the kind of data specific to our target group of BYU students. We will need to collect our own data by surveying BYU and UVU students. I plan to create a survey where people think of a specific person they have liked or not liked in the past. Each feature will then be associated with a question. An individual would be encouraged to submit multiple times to cover multiple scenarios. This would allow us to gather as much information as possible. The one-to-one mapping of the survey would make labeling the data simple. Assuming we can gather enough data, we will be able to train a model that can provide meaningful insights into Provo dating culture.