**Meeting time:** Saturdays 12pm

**Team members:**

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**Proposal:**

It would be great to have a USC student-specific dating website that allows students to get a potential matching based on the Gale-Shapley Algorithm. The Gale-Shapley Algorithm takes in men’s and women’s preference lists and generates a “stable” matching.

A matching is defined to be stable if there exists no man or woman who are not matched together, such that both desire to leave their assigned partner for each other. By creating this stable matching we are able to best match people in the most optimal way so that everyone can have an ideal partner.

In the original Gale-Shapley Algorithm, the men propose to the women, but this causes the men to get the best possible partners. However, we wish to flip the algorithm around, allowing women to be the ones “proposing”, therefore making sure they get their optimal matches instead. Ideally, we would also modify the basic algorithm, to be more inclusive of various sexualities and gender identities.

This site will allow users to rank people they already know. Since students will not know everyone else, we will have a form for users to fill out to see what preferences they have for their significant other. This form will generate a quantitative number to help rank other people, allowing users to get matched with people that best fit their preferences. When/if users are matched, the profile and social media handles of the users are shared, allowing them to get to know each other.

By creating this dating website, we hope to implement an algorithm that many CS students have theoretically analyzed in the classroom, and measure its success in a practical setting.