**Current Algorithm**

**Inputs:**

Google Sheet

0-3 for each slot: 1 slot per day of week

Slot type: is it a 4hr or 2hr

Hours: how many hours each student is working in the current matching

TA cap: a number of TA’s maximum per day (slot)

Not in use:

score of availability given (to be used as tiebreaker?) : count 2’s and 3’s?

experience column (number of semesters worked)

Question: new data inputs means that we can’t test if alg produces a “good” schedule for past years? i.e. how will we know if it works well?

**How preferences/data is read in:**

Create dataframe and use name or row number as unique identifier of a student.

Current bugs: some people get few hours,

Alg question: for getting a mix of experienced TA’s: check what other TA’s are in current schedule slot before putting someone in? Start with experienced and go down?

In general, should I start looking at things like OptaPlanner, or dive into coding an alg?

To change:

2,4 hour slots to k hour slots

Remove names entirely? (no alpha advantage)

Add incentive compatible tie breaker

Target number per day: deviation of +-1 ok

Multiple schedules change some pairing of TA’s

Split 126, 226 affects?

\*\*\*for surges(how to do this responsively, or based on past) (Grace’s ML model?)

1. How data is currently inputted
2. Data format I’m currently working with
3. Questions about data
4. Questions about algorithm

Proxy: google sheet to json

Alg: need to spread out 2’s. need to randomize order. Incorporate experience. Add availability (try without and see how it affects)?