- You jump from tasks and skills but you do not really clarify or define the types of skills (soft, cognitive, manual, etc)
- The example of statistical assistant wasn't as clear. Try to find a clearer job as an example (plumber, electrician, etc). A similar note can be made about the graders/sorters of agricultural produce.
- Be clear about what O*NET measures (i.e it measures skills within a task). Is there a measurement problem with using O*NET over time? The percentile change is fine so you may want to emphasize this more than the level change in the skill index. Say that some groups have changed by this much while others have changed by this much.
- Handling questions: either say that you will talk about O*NET later on in more detail or give a more succinct answer.
- You may want to have a more mathematically definitive explanation of what an occupation/task (i.e a task is a tuple (y1, y2, ...)). You want to analogously define traits for jobs as you do for workers (i.e if there is a continuum of tasks, is there a continuum of skills for those tasks or is it discrete?)
- Notationally Fatih seemed confused about the production function and it's relation to the assignment mapping. In particular, you want to be more careful on saying "the optimal assignment depends on properties of F".
- When setting up the environment, go incrementally instead of laying down the whole problem and then going into the details.
- Hannes mentioned looking into Acemoglu (2010) for a more elegant way of framing the task-assignment problem.
- The 1st graph could be presented better. In particular, you could present the workers and their mass first and then put on the tasks. For the second graph, you could do something similar with the mapping of workers to tasks.
- When you say a worker is in demand, what do you mean? I think more clarity on linking the area on graph 3 to "demand" would be helpful.
- Hannes asks a question on why there is an infinite number of tasks yet only a finite number of workers? It seems like a strange assumption. I think it boils down to why tasks are indivisible. It has implications for the size of the firm. Fatih mentions the idea of scaling down from a continuum to simply having a large set of tasks compared to workers/skills. If the Optimal Transport literature is flexible enough (does not require a continuum), then maybe at least acknowledge that the theory results don't change depending on tasks being countably infinite vs. uncountably infinite, etc.
- Have a clearer explanation of what q and F are in the production slide. It looks like a CD aggregator.
- Fatih seemed confused about the planners problem vs. the cost minimization problem of a firm. The cost minimization problem is the dual of the planner's problem. Be clear on why we care about the dual of the cost minimization problem and how you can decentralize the solution to the social planner's problem.
- Make the Note on the proposition clearer with the qualifier. I think you mean to say If $q(x_n,y) = q(x_m,y)$ implies $x_n = x_m$ holds for almost y, the proposition holds. You may want to state any restrictions on the space of tasks (Y) that are required in the optimal

transport literature. Fatih seemed confused on the geometry of the space of tasks. Hannes and Fatih started talking about some math stuff….

- When you get to an example of the optimal assignment problem, put a title on top saying "Example".
- Jeremy asked about the intensive/extensive margin i.e workers do not need to supply all of their labor to tasks. Would this change your results much?
- Hannes brings up your contribution to the field; in particular, you manage to do an assignment problem without supermodularity. But Lindelaub has done this in a multidimensional space. What is your contribution?
- What was the intent of the optimal assignment example on slide 16/17? I'd be careful and highlight the key things you want people to take away from that exercise (you can calculate labor share, you can do _____, etc).
- When you bring up the labor share, be careful in limiting yourself on what you have to say about it. Fatih and Hannes bring up questions (how wages affect output/profits, you don't allow for free entry/exit, etc). You may want to remain agnostic on the labor share or at least put some disclaimers on how you discuss profits/wages (i.e are you going to impose a zero profit condition like Hannes brought up)
- Your interpretation of not producing/doing a task is a bit confusing. It sounds like you are doing the O-Ring style idea of production (every input matters or else output is 0) but then you mentioned how if a firm wants to take a loss on a task it can (i.e "if I don't want to mop floors, I simply don't"). Be careful with your explanation or any assumptions on the production function.
- On the graph with specialization increases wages, present the mismatch relative to cognitive/manual diagonal. Specialization isn't well defined here (is it moving along the diagonal?)
- Hannes brings up an interesting point: take a position on specialization. For example, how does creating more cognitive jobs affect more manually gifted workers? In fact a result shows that it doesn't hurt them.... (or something like this)
- The two bullet points on slide 25 (technological feasibility and substitution with workforce) should be posed as "costs" and "benefits" of automation (or at least I think that's what Fatih what referencing).
- Hannes example is interesting: assessing how robots have historically been manual but now the AI revolution is introducing robots which have both manual and cognitive skills. It's a nice motivation for the problem you have with respect to putting the robot in the vertex (slide 26).
- Switch the order of the examples. Do automation, then specialization and then directed automation.
- Do an example of excess supply of workers (offshoring).