Meeting with David 28/08/24

- Discussing assessment – feedback on forms & other assessment items
- Plans for future and finalising how the rest of semester will look
- Discussing experiments, wrote report – found four things to give you what David needs
    - What's important is realisation, understanding & reflection
    - What David would look for is the ability to critically reflect on what has happened and will be done differently – hallmark of critical thinking
- Homework looks at Engineering Reasoning book by David – create frameworks that help us think critically about a range of things
    - If we want to reflect on deliverables, there are intangible deliverables that need to be called out – David finds it valuable to have people to talk with about the issue
- Minimise greedy allocation
    - What really are we trying to optimise
    - Considerations?
        - Fairness (favours nor disfavours everyone)
        - maximise the minimum benefit
        - Align with motivations where possible
        - fit between capability & needs
- Algorithm to identify good pairings
    - Algorithm is not issue but can't use what given
    - Human machine teaming – synergistic relationship is not front of mind
    - Looking at how to encourage that
- Representing a pairing
- Graphically visualising large dataset and options
    - Comes a point where one of limitations is looking at half the amount of data

Overall feedback

- Intermediate stage of making sense of our observations
    - Conduct experiment, make sense of observations, draw conclusions
- Suggests of making sense of our observations and salient features
- Don't want to lose sight of value of experiment we've conceived – that has very extreme value of intellectual property
- Not aware or thinking deliberately of good things – think of the '**why**?'
- "Found a way to create harmony with the operational benefits" – encourages us to call that out
- Make section headings much more informative – Show me the numbers book table of contents with extra information – consider section headers that give the reader knowledge of what's in the heading e.g. 'Introduction: the challenge of allocating whatever' maximise engagement
    - Employ logical flow of idea at a high-level structure
- SCALABILITY?
- Doesn't want four extremely different looking reports as it's hard to assimilate, wants consistency in the reports
- Implement things we research if we have time as an accompaniment to the report to provide simple demonstrations
    - Good idea to have report and demonstration as all contained
- Github to handover the work
    - handed in a way someone can use and organised/presented with handover in mind
    - how to provide things without compromising any problems
    - Demonstrate capabilities in IT
- Leave time to explore more things that David may have
- Idea 1: Scale each benefit by maximum benefit of each row, so that they're equal – does it have any pathologies? b(t.p) -> b(t.p)/max b(t.p)
- Idea 3: Sweep through lambda b = bimp (bfit + lambda bpref)
- How can we explore stable pairings