**Student In-Person Interview Results**:

I conducted in person interviews with 4 students from Informatics. Mix of postgraduate students and undergraduate students. These interviews dived deeper into the students experience with the allocation process at the school of Informatics. Each student signed and agreed to a consent form, allowing their information to be used in this report and for future research. Each student number was randomly generated.

-**Student 548731:** They did not like the process, and it effected their studies at the university. They proposed their own topic and ranked it number 1 and was allocated their 9th choice that they weren’t marked suitable for. Said that no one in the school was able to give them a reason why this happened and was not supportive in helping them find a different project. This student felt like no one was investigating the allocation, seeing if it was fair, or if it was working as intended. They stated there was nowhere to make official complaints. They felt like all responsibility was on the student, so it was hard, and they didn’t know what to do when they didn’t get their proposed topic. They were told the algorithm doesn’t make mistakes, which felt like a lack of curiosity from people in an academic institution. This student felt unmotivated to complete their dissertation after finding a new supervisor and new project by themselves, and said it negatively impacted their time at this University.

-**The advice that student 548731 gave:** publish data on the results of the allocation for students to see, possibly allow students to see the algorithm, have contingencies in place for when a student feels like they have been allocated unfairly, and prepare for those situations. Require the staff to respond to suitable or not suitable and have more clear timelines. Make sure that there are backups for students ranked unfairly, and make sure a student is not on their own after a bad allocation.

-**Student 482739:** Proposed their own topic with company support and received that topic in the allocation. They were happy with that result. However they said the process of proposing their topic was poorly laid out, and there was no support. They said the deadline for self-proposing was early and a bad time of the year during the holidays, and it was hard finding a supervisor. There was also no support in finding supervisors. They felt it was a waste of time meeting up with other supervisors and doing a lot of research on other projects, when they were only interested in their project. They thought the process of meeting with supervisors of other projects was a limited timeline and was unnecessary stress during an intense coursework time. They felt like there was no clear deadlines and poor organization and felt like students were not notified of the deadlines until the last second.

-**The advice that student 482739 gave:** Improve on efficiency: lowering number of project students need to rank, maybe 3 projects. Don’t have to approach a lot of supervisors distracting from their work. make the information about the algorithm available to the students. Algorithm is described as a black box, and no one knows how it works, which allows for speculation. So, students don’t rank projects based on what they think they’ll get instead of what they want. Person in charge needs to give some clear info not speculation to students and set clear deadlines at the beginning of the year. Support and clear instructions for students who want to self-propose. There is no support on how to write a proposal for the DPMT system.

-**Student 748923:** Did not propose a topic and got ranked their 4th or 5th choice. They wanted to propose their own topic, but there was not enough time to submit one and find supervisor after finding out the deadline of self-proposals. Felt like in the 1-year master’s program there was not clear deadlines, and hard to find a supervisor after not knowing a lot of faculty members. They said the process felt rushed and didn’t feel fair as they didn’t get their interested project. Fingers crossed for top 2 or 3 since they only wanted those. After allocation their supervisor changed the project after their proposal was submitted and during the start of the dissertation time. Project became different than the description, was machine learning and time series data, and turned to probability theory. This caused a big impact; they reached out to their supervisor to approve them to find a new supervisor and they had 2 days to write a new proposal. They said it was really draining and time consuming, took away from their academics and focusing on classes. Process was dragged on, and felt like a waste of time. Not excited to work on their project. Still in touch with other supervisors who wanted to work with them, and they get updated by those supervisors on their projects. More interested in those than their own project.

-**The advice that student 748923 gave:** Need less time pressure, more guidance in the process, maybe someone to talk to for help in finding a project or a supervisor, and more time for self-proposed projects. Self-proposed felt like a secondary thing and there should be more resources available to help with self-proposals. Need more courage doing self-proposals, there was no support for it. If you self-propose it should be a done deal, not allocated another project. We need more clarification, I didn’t know about the difficulty level or what it meant, based it on my own interpretation. Wish we could see the projects first and then could self-propose if we didn’t like the projects proposed.

-**Student 591204:** Did not self-propose and got allocated their 3rd or 4th project, they are motivated and happy with their project. They said the process was quite confusing, lot of speculation how it worked and best to give it a ranking to make it, so you got what you wanted. Hard to know if you should rank projects based on popularity or based on what you wanted. They said it didn’t seem efficient, took weeks to find result. Some people they knew didn’t get the best project and weren’t happy. Wish they knew how you should rank your projects, certain number, if they should take account of popularity. More clear definition of the algorithm and the process.

-**The advice that Student 591204 gave:** Quicker turnaround of finding out projects or more information why it took weeks, don’t know why it’s so slow. Have clear guidelines about how students go about the process, clear deadlines at start of term, and make sure staff knows the process as well.

**Online Survey Results:**

I received 16 survey participants online, where they volunteered to test different elicitation devices and answer questions at the end. Each student agreed to a consent form, allowing their information to be used I this report and for future research. The online survey compromised of the following elicitation devices: ranking projects 1-20, adding a score 1-10 to those ranked projects, grouping projects into categories (I really want the project, I’m okay with the project, I don’t want the project, and I am not qualified for the project), and saying yes or no to projects. There was also questions at the end that each volunteer could answer and those are below with the average time it took to complete each elicitation device.

**Ranking Times:**

**Average Time: 27 minutes and 1 second.**

**Scoring Times:**

**Average Time: 1 minute and 34.67 seconds.**

**Group Times:**

**Average Time: 4 minutes and 14 seconds**

**Checked Times:**

**Average Time: 2 minutes and 26 seconds**

**Please rank the following methods based on how effective you think they were:**

-"Group Projects, Rank Projects, Score Projects, Check Projects"

-  "Score Projects, Rank Projects, Group Projects, Check Projects"

- Check Projects, Score Projects, Group Projects, Rank Projects"

-"Check Projects, Score Projects, Group Projects, Rank Projects"

- Score Projects, Check Projects, Rank Projects, Group Projects

-"Score Projects, Rank Projects, Group Projects, Check Projects"

-Group Projects, Score Projects, Rank Projects, Check Projects"

-Score Projects, Group Projects, Rank Projects, Check Projects

-"Score Projects, Rank Projects, Group Projects, Check Projects"

-"Rank Projects, Score Projects, Group Projects, Check Projects"

-"Rank Projects, Group Projects, Score Projects, Check Projects"

-"Rank Projects, Score Projects, Group Projects, Check Projects

-"Score Projects, Rank Projects, Check Projects, Group Projects

**Is there a different way of ranking projects you think would be beneficial for project allocations?**

-"Grouping, with scoring (or optional ranking) within groups, could better represent my sentiment about the projects. Simple project ranking forces an ordinal ordering on projects that I feel the same about. Grouping allows me to bucket the options more freely without having to place one over another. While simple scoring could achieve this effect, it’s not very user-friendly, because it's hard to keep track of scores, and often I find myself going back to change the scores on projects I’ve assigned before as I work through the projects list. Grouping allows projects to be progressively categorised as I work through the list, which is helpful. However, simple grouping does not represent well the granularity of sentiment, e.g. “Separate from the project’s I’m okay with, I really want both projects A and B, but want A more than B.”; So, a combination of grouping and scoring could be useful here.”

-"Maybe a way to filter project based on research group. So, i can focus om what i can work with instead of opening a project that i have no skills for. It’s a waste of time."

-"First check them to instantly eliminate ones that the person does not want to do, then rank the ones they want to do, then score them. letting them get rid of a few options at the start makes ranking them easier, then using the score method lets them show if there are any that they equally do & don’t want to do. Using a combination of methods would be more efficient than just trying to order the methods from best to worst then picking the best one."

-"Unfortunately, we are not made aware in any way of the project allocation algorithm. This makes it almost impossible to decide if there is a better way"

-"Create some general domain buckets and let students rank projects in those buckets, then rank the buckets themselves. If one project fits in multiple buckets, you can put it in all of them or just the main one, but this should be clearly communicated, and the project supervisor should be the one to put a project in a bucket. In terms of practically allocating projects, you can allow students to add weights both to buckets and the ranking of the projects. There are many ways of implementing such a weighting system, but any implementation that is chosen should be explained IN DETAIL to the students."

-"I liked the scoring and grouping ones. Ranking was a bit too difficult without numbers associated, for me."

-"probably a mix of all the systems would be useful considering the number of students and projects that are available"

**If you have experienced the project allocation process in The School of Informatics, what was your opinion of the process? And did you like the outcome?**

-"I experienced a ranking system that considers the top 5 choices and tries to give me my first choice. I received my first choice and was satisfied with the outcome. But I was forced to ordinally rank projects that I felt the same about, which was a bummer."

- “The system for submitting preferences was fine, however I thought that the process as a whole was unnecessarily mysterious, and often it was impossible to get answers about simple details of what we should do from staff."

-"I had to gamify. I know it wasn’t allowed but i had to. And it worked for me. I got the project i wanted. I think the school needs to be more transparent. Ex. At the start they say they don’t know what the outcome will be but in the middle before announcement of allocation they said that usually people would get first or second choice. Also, i see that some projects are low in interested students and some have really high interested students, so I’ll say that it is gamification either way and that there is a way to get the project I want. As I intentionally only have 1 high interest project ranked number 1 and the second has low interest in students. So, I don’t have issues with the algorithm but more like the social part of the process."

-"Thankfully, I have self-proposed a project and thus was given it automatically. For the most part however, most of peers did not get their top 3 choices"

-"Too secretive on the details. The entire ranking and allocation process was made a black box for no reason and to the detriment of students. Opensource the algorithm and let students simulate things because at the end of the day it is not about what you prefer or you are qualified for, it is about the odds of what you can get. A VPN is required to access the platform unless EDUROAM is used. In fact, the platform itself feels outdated and lacks a lot of quality-of-life features. Direct communication with the supervisor through the platform is one. A better breakdown of the odds of getting the project based on other user preferences and outcome of suitability. And there could be many more. I was happy with the allocation result & outcome but not with the process for the above-mentioned reasons."

-"I think the process should be simplified and more transparent. It would be great to know why you weren’t allocated a project you picked as your first."

-"I thought the process was ok but took far too long to get the results and having to individually meet with supervisors even for projects that weren’t in my top 3 for example was quite a waste of time."

-"It was a bit difficult to sort through the projects given how many there were (not that the variety and number of projects is a bad thing, it just makes searching difficult). It would’ve been quite easy to miss projects which I might’ve found interesting if I didn’t go through them one by one. I was happy with the project I received, but because it was quite a niche area, very few people had applied for the project I got, which (probably) made it a lot more likely for me to get it"

-"It was a negative experience. Huge impact on my final year of university and wasted a lot of time trying to improve my situation to no avail. No recognition of the impact that was caused to me or assistance to rectify."

**Any other feedback you have about ranking projects or project allocation?**

-"Transparency on information sharing. Sharing the info about project allocation as early as possible like maybe 1st semester so people who want to propose project can do so (especially those who came here by company scholarship) because when given on second semester it is a bit too much. So maybe you can make it into a few parts. Also, i think introducing the research groups and who will be supervising and what their expertise is would be helpful (this is done at Uni of Birmingham). And make a filter that is easier to use and navigate."

-"instead of only using the rank method at the end page (for score, rank, group and check) you should also use the scoring method, as some people may find two of these methods equally good. also, when working with a smaller number of things to rank it makes it seem like there is a big jump in how good each of the methods are as you go down the ranking. the score method would be able to show numerically how close each of the methods are in terms of how good they are."

-"Please do a study on the platform used for allocation and ranking. There are many good ideas that would help the project allocation process that do not have anything to do with the ranking system."

-"Given the large number of projects available in the real system, I think going one-by-one and giving each a numerical ranking, ordering etc. is too time consuming. Perhaps you can only rank the ones you have expressed interest in to begin with to speed that process up"

-"someone needs to be responsible for checking the fairness of the algorithm and understanding how it works and checking it every year."