## DA CDT Interview Guidance for Applicants

Interviews typically take up to one hour. You are asked to prepare a 3-minute presentation\* for the beginning of your interview. You can present this live or share a pre-recorded video of your presentation. The panel members will use this as a basis for discussion and ask questions that will enable them to find out more about you, your experience and skills and interest in research.

The purpose of the PhD is to train you such that you will have all the skills and experience graduates need at the end of the PhD: while we are obviously keen to understand where your current strengths are, there's no point applying if you have all the skills already!

We don't expect applicants to have skills in both data science and computing, but experience in <u>one</u> numerate subject (such as statistics, computer science, physics, engineering, electronics, chemistry, biostatistics, etc) and the interest in developing more skills.

The panel's focus is on assessing your experience: it is important to share what you have done, not what you might plan to do (since anyone can plan anything, but only you have done the combinations of things that you have done).

The questions will focus on collating the evidence that enables the supervisors to quantify your suitability for undertaking the PhD. The aspects of your experience that the supervisors need to assess and questions that exemplify the questions you might be asked in the context of each of the four aspects of your experience are as follows (you wouldn't be asked all of the follow-on questions, but we've deliberately provided a longer list than we might do to give you as good an idea as we can of what sort of things might be asked):

- 1. Your background in "Data Science" (which we assume goes beyond Computer Science and includes what Mathematicians call statistics, Engineers call signal processing and scientists call quantitative methods):
  - a. What experience do you have of clustering, classification and regression?
  - b. Can you explain what you did in your most recent degree that is relevant to Data Science?
  - c. What's the smallest dataset you have analysed?
  - d. What's the most interesting research paper that you have you read?
- 2. Your background in "Future Computing Systems" (which we assume includes programming, but might also include use of HPC, Big Data middleware (MPI, Hadoop, Spark etc))
  - a. What programming languages have you used?
  - b. What experience do you have of using HPC?
  - c. How many lines of code have you written?
  - d. How do you ensure that the code base you have written is easy for others to follow?
- 3. Your experience of working with people outside academia
  - a. How did you engage with the people that would use the output of your most recent project?
  - b. What did you feel were the differences between the people you encountered in your degree and the people you encountered when you were working in the holidays?
  - c. What did you learn from your interaction with people working outside academia?
- 4. Your alignment with the specifics of the project and the CDT more generally
  - a. What makes the vision for the DA CDT (link to programme overview) appeal to you?
  - b. What makes the cohort-based training model that the DA CDT adopts appeal to you?
  - c. Why do you want to do this PhD?
  - d. What evidence do you have that you are a quick learner who is likely to flourish in the CDT and beyond?

\*please refer to the Presentation Guidance for CDT Interviews found on our applicant FAQ webpage: <u>https://www.liverpool.ac.uk/distributed-algorithms-cdt/apply/student-faqs/</u>