2023 Summer Research Interview Cheatsheet

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May 25, 2023

1   Introduction

This document is designed to evaluate the candidate's proficiency in 1) performing code review and authoring, 2) generating innovative ideas, and 3) conducting research on various topics, as well as utilizing relevant tools. Although not all the questions contained in this document may be posed during the interview, thoughtful reflection and proactive preparation are highly encouraged.

2   Research Database Development

2.1   Goal

During the upcoming summer, we will be partially engaged in the development of a research tool. This tool is aimed at gathering information about scholars and associated academic papers. Utilizing technologies like GPT, we will start by crafting robust scrapers and contemplating effective methodologies for information storage.

2.2   Code

The initial code can be found here.

2.3   Tasks

1. What's the purpose of the code?

2. How can the code be further improved?

3. How can you find researcher's connection and find related researchers or work?

4. Given your thoughts on the previous question, could you conduct a comprehensive research on these researchers: Anouk Keizer, Gijs Huisman, Merel Jung, Karen Lancel, and Jan van Erp? Identify their closest collaborators (3-5 individuals) based on their academic relationships.

5. With the availability of the researchers' details and authorship history, can you utilize any specific tool to summarize their most impactful contributions and their most recent studies? How would you go about accomplishing this?

2.4   Good luck!

If you have any question, feel free to email xinzhu@usc.edu for help.