- **The problem is NP.**

  A certificate of this problem is a list of n selected CVs. We can check in polynomial time $O(n^2)$ for every pair of CVs whether they have exactly the same topics.

- **The problem is NP-hard.**

  We find CLIQUE known to be NP-complete.

  - **Reduction**

    Given an undirected graph G containing a clique of k vertexes, we are able to generate a list of all experts L with k of their CVs being selected.

    We create a list L whose number of CVs is equal to the number of vertexes in G. Each vertex in G has a unique corresponding CV in L. Then, for every two vertexes v_i and v_j that are not directly connected, we assign an exclusive skill to their corresponding CVs c_i and c_j. Among all the CVs, only c_i and c_j contain this specific skill.

    Our reduction guarantees that for every two vertexes, if their corresponding CVs overlap then there is no edge between them, which can be proved by contradiction. Suppose there is an edge between two CVs c_i and c_j who both have skill s. Because a skill is assigned to two CVs at a time, there must be some CV c_i' other than c_j that is assigned s when c_i is assigned s. This contradicts the fact that of all CVs only two of them have s.

    The reduction function runs in polynomial time $O(\mid V \mid^2)$.

  - **Claim 1: If $(G, k) \in$ CLIQUE, then $(L, j) \in$ the problem.**

    $(G, k) \in$ CLIQUE means that every pair from the k vertexes in G are connected, and that the corresponding k CVs to the vertexes do not overlap. Because there exists a way of selecting $k = j$ CVs, (L, j) belongs to the problem.

  - **Claim 2: If $(L, j) \in$ the problem, then $(G, k) \in$ CLIQUE.**

    Suppose we are able to select j CVs out of L, then each CV must have non-overlapping topics with every other CVs. For any two vertexes in G, if their corresponding CVs do not have overlapping topics, there will be an edge between them. Then G must have a clique of size k where every vertex is connected to others. The instance (G, k) therefore belongs to CLIQUE.

  Thus this problem is NP-hard.

- **The problem is NP-Complete.**

  Because the problem is both NP and NP-hard, it is also NP-Complete.