CLAIMS

1. A computer-implemented method for matching a potential candidate desirous in seeking employment to a job position, the method comprising:

(a) providing a database comprising at least 50 job positions each with a job description, job requirements for at least 50 job positions, and at least 50 candidate profile data sets, wherein the job requirements are provided by analysing said job description by natural language processing methods to identify the job requirements;

(b) computing a job score for a candidate for each job position by comparing the candidate profile data set with said job requirements; and

(c) generating a set of job recommendations for each candidate based on the job score by a minimum cost flow method.

2. The method according to claim 1, wherein the job description is analysed by parsing the job description and matching the parsed data to a set of abilities data to identify job requirements associated with the job position.

3. The method according to any one of claims 1 to 2, wherein the database comprises at least one candidate and the method comprises creating the candidate profile data set associated with said candidate.

4. The method according to any one of claims 1 to 3, wherein the candidate profile data set comprises at least one selected from the group comprising of skills competency, skills to learn, courses taken, academic results, leadership qualities, involvement in volunteer work, the candidate's preferred industry, the candidate's preferred job function, the candidate's location, the candidate's expected salary, the candidate's company type preference and psychometric data of the candidate, and computing a skills score, a skills to learn score, a course score, an academic results score, a leadership score, a volunteer score, an industry score, a job function score, a location score, a salary score, a company

type score, and a psychometric score respectively based on the available data in the candidate profile data set and an individual score based on the candidate's preferred job function.

5. The method according to any one of claims 1 to 4 wherein the job score is based on an average of a candidate capability score and a candidate compatibility score, or by using each of the candidate capability score and the candidate compatibility score as the job score to generate the set of job recommendations.

6. The method according to claim 5, wherein the candidate capability score is computed based on the skills score, the course score, and the leadership score.

7. The method according to claim 6, wherein the candidate capability score is further computed based on at least one of the academic results score and the volunteer score.

8. The method according to any one of claims 6 to 7, wherein the candidate capability score is computed based on weightages in the job requirements.

9. The method according to any one of claims 6 to 8, wherein the skills score is computed by iterating each skill in the job requirements against the skills competency in the candidate profile data set; recording a highest score generated for each skill; summing the highest scores for each skill in the job requirements to generate the skills score.

10. The method according to claim 9, wherein the skill score is normalised based on a ranking or rating of the candidate's skills in the skills competency data.

11. The method according to claim 10, wherein the skill score is normalised by combining the ranking or rating of each skill of all the candidates to generate a distribution curve; selecting multiple percentile points to map a function; and

generating a normalised requirement score for each skill and used in summing the highest scores to generate the skills score.

12. The method according to any one of claims 5 to 11, wherein at least one of the following conditions is fulfilled:

(a) the course score is computed by determining if there is a first match between a course taken by the candidate and a course requirement in the job requirements; and computing the course score based on whether the first match is present and an existing employment data set;

(b) the academic results score is computed by determining if the academic results in the candidate profile data set meet a minimum threshold in the job requirements;

(c) the leadership score is computed by classifying the leadership qualities in the candidate profile data set into one of a plurality of groups, each group having a specific value and classified based on an existing employment data set; and

(d) the volunteer score is determined by determining if the involvement in volunteer work in the candidate profile data set meet a minimum threshold in the job requirements.

13. The method according to any one of claims 5 to 12, wherein the compatibility score is computed based on at least one of the following components: the skills to learn score, the industry score, the job function score, the location score, the salary score, the individual score and the psychometric score.

14. The method according to claim 13, wherein the components of the compatibility score may be weighted according to the job requirements.

15. The method according to claim 13, wherein at least one of the following conditions is fulfilled:

(a) the skills to learn score is computed by iterating each skill in the job requirements against the skills competency in the candidate profile data set;

recording a highest score generated for each skill; summing the highest scores for each skill in the job requirements to generate the skills score;

(b) the industry score is computed based on a similarity between the candidate's preferred industry and an industry of the job position, and a rank in the candidate's preferred industry;

(c) the job function score is computed based on a similarity between the candidate's preferred job function and the job function in the job requirements, and a rank in the candidate's preferred job function;

(d) the location score is computed by determining a commute time between the candidate's location and a location of the job position; and determining the location score based on a function derived from a plotted distribution of commute time for the job position or similar job positions;

(e) the salary score is computed based on an extent the candidate's expected salary falls within a salary range in the job requirements;

(f) the individual score is computed based on the difference between the candidate's preferred job function and a job function in the job requirements.

16. The method according to any one of claims 1 to 15, wherein a network simplex method is used in generating the set of job recommendations.

17. The method according to any one of claims 1 to 16, further comprising generating a second set of job recommendations for each candidate based on a ranking of the candidate's preferences.

18. The method according to any one of claims 1 to 17, wherein there are more job positions than candidates.

19. A non-transitory medium comprising instructions which when executed by a processor causes the processor to perform the method according to any one of claims 1 to 18.