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(54) **Title:** METHOD AND APPARATUS FOR IMPLEMENTING A ROLE-BASED ACCESS CONTROL CLUSTERING MACHINE LEARNING MODEL EXECUTION MODULE

(57) **Abstract:** Various methods, systems, apparatuses, and media for implementing a machine learning model execution module are provided. A processor accesses human resource (HR) attributes and profile information data of users from a database. The processor applies hierarchical clustering algorithm to create a machine learning model by clustering users based on accesses to applications that the users have corresponding to the profile information data of the users. All users in one cluster have the most similar accesses to applications. The processor iterates the process of accessing the HR attributes and the profile information data of the users from the database until it is determined that an optimal number of clusters have been created for the machine learning model.

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