Talent management is a critical part of every organization. One of the many facets of talent management is employee recruitment and retention. It is important that organizations have the ability to identify suitable professionals to fill their vacant job positions. LinkedIn is a business- and employment-oriented social networking service that is widely used by both employees and employers. The platform provides a wealth of information regarding the skills, education and experiences of professionals in today’s world. Using the mentioned information obtained from LinkedIn, this dissertation explores the use of machine learning in a quest to better classify what employees would be suitable for an organization. The machine learning techniques which are implemented are support vector machine, random forest and k-means. The three techniques were trained and tested under the same circumstances. Evaluation of the tests showed positive results especially in the case of support vector machine.