DVA: Dynamic voice signature based multifactor authentication system.

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User Authentication is the first and basic step to secure a system or an app, historically single factor authentication was more common than multifactor authentication, today multifactor authentication is preferred over single factor authentication to provide a high level of security, yet multifactor authentication has problems of acceptance and technological requirements, in addition to the circumventing methods and techniques. In this paper, the author is presenting a dynamic voice authentication system (DVA), which is a solution to the problems and challenges faced by multifactor authentication systems. DVA uses a voice signature generated based on a dynamic text string (source string), a voice pattern matching is done against a registered voice signature along with speech to text verification of the source string. Both the factors provide added security and address many of the deficits in common multifactor authentication systems.

Keywords: Authentication, Voice Signature, Biometrics.

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