## Authentication System Based on Morse Code Using Artificial Intelligence

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## Abstract

Data science is a multidisciplinary field that combines data inference, algorithm development, and technology to tackle analytically challenging problems. It is utilised in practically every industry, including education, finance, healthcare, and business, to handle massive amounts of data. The practical applications include everything from predicting stock movement to predicting cancer; employed in identity recognition, speech recognition, and text prediction in audio processing. Since the majority of individuals worldwide experience difficulties with security and authentication, an authentication system is necessary. For those who authenticate themselves using Morse code, it offers real-time eye tracing for password authentication. The webcam captures the user's image and records the password that is typed in the to solve analytically challenging issues, data science is a multidisciplinary method that combines technology, algorithm development, and data inference. Nearly every industry, including businesses, financial organizations, healthcare providers, and educational institutions, uses data science to manage massive amounts of data. They are used in anything from identity recognition to picture processing to text prediction; the real-world applications range from stock movement prediction to disease detection. An authentication system is required because security and authentication problems affect the majority of individuals worldwide. It provides instantaneous eve tracing for password authentication for people who use Morse code to confirm their identification. In order to identify the user and record the password entered in the to solve analytically challenging issues, data science is a multidisciplinary method that combines technology, algorithm development, and data inference. Nearly every industry, including businesses, financial organizations, healthcare providers, and educational institutions, uses data science to manage massive amounts of data. They are used in anything from identity recognition to picture processing to text prediction; the real-world applications range from stock movement prediction to disease detection. An authentication system is required because security and authentication problems affect the majority of individuals

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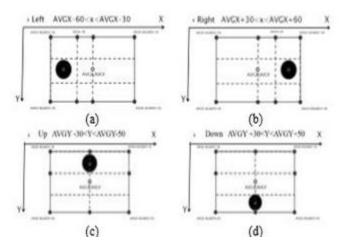
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Fig(1): Directions of AVGY

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MODEL	ACCURACY
KNN	70.43%
SVC (RBF)	73.98%
Random Forest	87.16%
XGB	93.60%

Table 1: Model and Accuracy

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