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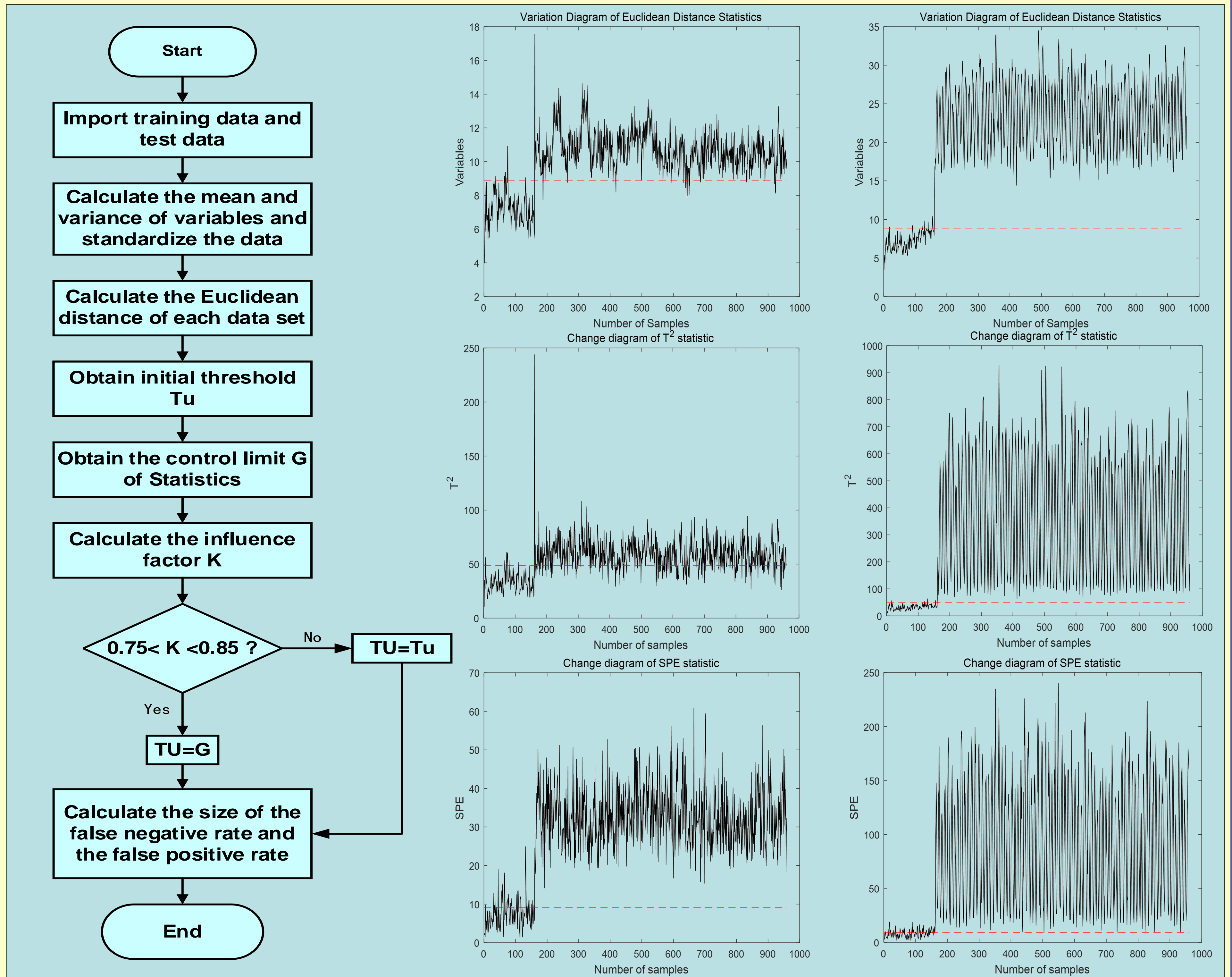
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Research on Fault Detection Method Based on Improved Euclidean Distance Control

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Flow and simulation diagram of fault detection method based on improved Euclidean distance control

The fault detection method proposed in this paper is applied to the simulation analysis of the TE process. Compared with the traditional principal component analysis method, the product fault negative rate and false alarm rate can show a good detection effect in multiple groups of the test data.

- In this paper, a fault detection method based on improved Euclidean distance control is proposed.
- This paper calculates the Euclidean distance between vectors from the variables themselves to reduce the impact of errors.
 - This paper proposes an adaptive strategy based on feedback regulation to select the threshold size.
 - Compared with the traditional principal component analysis method, the proposed method has more advantages in data detection.