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## Design and Development of Novel Technique for Diabetic Retinopathy Features Classification

Sonali Gaikwad <sup>(1)</sup> Jyotsna Gaikwad <sup>(2)</sup> Ramesh R. Manza <sup>(3)</sup>

<sup>(1)</sup> Vivekanand Institute of Advanced Studies in Management Science and Communications, Aurangabad, India.

<sup>(2)</sup> Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, India.

<sup>(3)</sup> Department of Computer Science and I. T, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, India.

### Abstract

*Diabetic retinopathy occurs in people who have diabetes from last 8 to 10 years. It can damage the retina, the light-sensitive lining at the back of the eye. Diabetic retinopathy is a major sight-threatening snag of diabetes. The disease is considered by too much sugar in the blood, which can reason damage all through the body, including the eyes. DIARETDB0, DIARETDB1, STARE and DRIVE online fundus image database is taken, total 656 image. Diabetic retinopathy is categorized into four diseases such as abnormal blood vessels, hemorrhages, microaneurysms and exudates. After extraction of diabetic retinopathy features classification is performed. Proposed technique for identification of stage of diabetic retinopathy, means whether the extracted feature image is normal or abnormal. That we have classified with the help of proposed classification algorithm. Also principal component analysis and linear discriminant analysis is applied on extracted diabetic retinopathy features. For principal component analysis we got 94.80 % result and for linear discriminant analysis we got 93.13 % result.*

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