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(51) International classification	:G06K0009000000, G06K0009460000, G06T0011000000, G06T0007110000, G06T0003400000	(71)Name of Applicant : 1)CGC Technical Campus Jhanjeri Address of Applicant :State Highway 12A Jhanjeri, Sahibzada Ajit Singh Nagar, Punjab 140307, India. Punjab India
(31) Priority Document No	:NA	(72)Name of Inventor : 1)Kirti
(32) Priority Date	:NA	2)Rose Alex
(33) Name of priority country	:NA	3)Dr. Raman Chadha
(86) International Application No	:NA	4)Geeta Singh
Filing Date	:NA	5)Rohini Mahajan
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(57) Abstract :

The multi-dimensional facial image capturing unit for gathering facial image or frame of video from a user, a pre-processor for generating a bounding box for detecting face in the image or frame and cropping the image or frame on the basis of the box, a feature extraction module for extracting multidimensional facial feature(s) from the cropped image or frame through a residual network, an enhancement module for enhancing the feature(s) with finer resolution features via a modified hourglass protocol and increasing spatial resolution of the enhanced feature(s), a computing that passes the feature(s) through multiple convolution layers for identifying landmark point(s) in the image or frame and generating stride score-map(s) for the point(s), and a training module associated with the computing unit for training the system with the map(s) and random augmentation(s) to increase the efficacy of the system.

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