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A Fully Automated Cell Segmentation and Morphometric Parameter System for Quantifying Corneal Endothelial Cell Morphology

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Highlights

- A fully automated and real-time cell segmentation and morphometric parameter system for quantifying corneal endothelial cell morphology is developed, termed the Corneal Endothelium Analysis System (CEAS).
- The CEAS system underpins the expertise of ophthalmologists.
- It is able to accurately detect the boundaries of the endothelial cells for the early diagnosis of corneal pathology and determining the health status of corneas for transplantation (Keratoplasty).
- A number of useful clinical features that can be used to save a useful amount of clinician time in the process.
- A clinically helpful diagnostic system for busy clinic and patient care.

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