Smart Palm Reading App with Automatic Pattern Recognition (iOS platform)

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Objective
To allow users to take a photo on their hand, then recognize palm patterns and generate palm reading results automatically.

App Infrastructure
- User Interface & Functionality: Objective-C
- Third-party Library (Facebook, SQLite): Objective-C
- Intermediate Wrapper: Objective-C++
- Shared Library: C++ (Automatic Recognition)
- Third-party Library: C++ (OpenCV)

Shared Library Pipeline
Input: Hand Image
Pre-processing:
- Thresholding
- Desaturation
- Dilation

Region of Interest (ROI) / Palm Extraction
- Locating Special Points
- Interpolation
- ROI Determination
- Finger Extraction
- Palm Shape Detection
- Principal Palm Line Extraction

Outputs

Screencasts