Learning to Read: Mobile Optical Character Recognition of Hindi

Every year, tourists flock to India, only to find themselves lost without being able to understand the Hindi written on menus, stores, and street signs, to name a few examples. To solve this problem, an iOS app was developed to capture an image of, extract, and translate Hindi text. The text extraction was done using a deep convolutional neural network trained to recognize Hindi characters. The model was ported into native iOS using CoreML, which takes advantage of various low-level libraries, allowing the algorithm to run efficiently on iPhone hardware.