

Mobile OCR (optical character recognition)

Client

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Background

We have a current need for users, in particular mobile users, to be able to upload images, such as business cards, and then use that information to auto-fill information contained in the business card. OCR technology these days is fairly robust with open-source libraries such as Tesseract, but still needs some TLC sometimes. An interface to provide that TLC is where you come in.

Project Goals and Requirements:

You will use Javascript and HTML5 to build a user interface to take in an image, use an OCR library to process that image, and then attempt to predict what fields correspond to fields that are expected in the image. Part of the prediction process can use learning from previous uses of similar images. Once the predictions have been made, you will display your choices to the user, and supply an interface to modify the field mapping and correct type-o's (which sometimes occur depending on image quality/font).

This will be deployed in a hybrid mobile environment using Cordova, to enable deployment to both Android and iOS markets.

Students will learn about mobile web development, in particular Javascript, and how to deploy HTML5 applications into mobile application markets.

Suggested Team Size:

3-4 students

Paid internships are available after Field Session for students that perform well.

Skills/Experience for CSM Students:

- Javascript/AJAX
- Hybrid mobile applications (cordova)
- OCR (most likely tesseract, but will be determined as part of project)