

## Team Nerdvana

### Senior Project Expanded Proposal

**Trading card game image recognition app** → Web application that takes an image of a trading card from a TCG (Magic the Gathering, Pokemon, Yu-Gi-Oh, etc.) and then displays what the card is and how much the card is worth from various online retailers like Amazon, Ebay, etc. You should be able to upload a picture or take a picture right there and then. Card price should be ordered by who sells it the cheapest to most expensive.

- What is new/original about this idea? What are related websites/apps?

There is an app on the app store and the google play store that does exactly this with some extra functionality (TCGplayer App). The only thing new about this would be that it would be a website instead of a phone app.

- Why is this idea worth doing? Why is it useful and not boring?

This idea is worth doing because it's interesting and serves a purpose. The main idea is that when you're unpacking cards and you get an interesting looking one you can scan it and see the current price of that card.

- What are a few major features?

Choice between uploading a picture or taking on right there.

Using image recognition to find out what card the image is of.

Finding the prices of these cards and displaying them on the page.

- What resources will be required for you to complete this project that are not already included in the class.

Learning how to use/train an image recognition API.

- What *algorithmic* content is there in this project?

An algorithm could be used to scrape local card store website for the prices they might have on a scanned card.

- Rate the topic with a difficulty rating of 1-10

Probably around a 6 or 7 given the new material that would have to be learned by everyone.