

# A Coherent Presentation Practice

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Hello, everyone. Today, I would like to introduce my research to you.

My research's theme is sentiment classification of documents by machine learning. First, let me explain about the 2 main terms, sentiment classification and machine learning. The first one, sentiment classification is a task in which we classify something into 2 or more classes by its sentiment. Sentiment is a kind of emotion, feeling or reputation for something. For example, the number of stars given to the products on Amazon's website is a sort of sentiment representation. The second one, machine learning is a way to let computers learn something. More mathematically, it is a way to find the best function giving the most appropriate output to each input automatically by algorithm which is implemented as a computer program. In fact, while finding the best function from the entire set of possible functions is a hard problem, we define a model, one subset of the entire function set, having parameters and find the best function by optimizing its parameters. In summary, my research is about how to find the best function, so called a classifier, which takes a document as input and the most appropriate sentiment representation for it as output. And, the purpose of it is proposing a model which can become the best function by parameter optimization. Every paper about machine learning usually about a model the authors propose and describes how good performance the model achieved.

$$y = f(x; w)$$
$$\left\{ \begin{array}{l} y : \text{Output} \\ f : \text{A model} \\ x : \text{Input} \\ w : \text{Parameters of the model} \end{array} \right.$$

As others, our research proposes a new model. Then, let me show you what is our new model. The features of our model are as follows.

1. The model uses the method of Artificial Neural Network (ANN).
2. The model takes fonts in the document as input.
3. The prior knowledge about the document structure from characters to documents is incorporated into the model.

Let me describe the each items. First, ANN is a model which imitates the mechanism of brains we have. Aside from the relation of ANN and brains, an ANN model can be represented as a mathematical matrix function. Second, probably, fonts have been much familiar to you. A font is an image corresponding to a specific character and mainly used in computers to display characters to screens. Third, the model uses structures of documents as inputs. As you know, a document is made up of sentences and a sentence is made up of words and so on. Summarizing all in the list, the model classifies documents into sentiment classes building and representing fonts, characters, words, sentences, a document and its sentiment as matrices, vectors, or scalars.

## Top Customer Reviews

★★★★★ This is a steal for \$50 as long as you aren;t expecting a "Premium" experience.

By [Geoff Hulse](#) on October 2, 2015

Configuration: [With Special Offers](#) | Color: [Black](#) | Digital Storage Capacity: [8](#) | [Verified Purchase](#)

I pre-ordered this for my wife mostly to use as a Kindle E-reader as I figured the tablet would be slow and the display would be less than impressive. I was wrong. What a bargain this little beauty is! This model cost \$49.00 but it comes with ad's displayed on the lock screen when your tablet is dormant. Once your screen times out, they disappear. You can pay \$15.00 up front to get an ad free version so I assumed to unlock the tablet I'd have to spend 15 to 30 seconds looking at an ad for Amazon Prime, or a product from the daily specials section of Amazon.com I abstained from paying for Ad removal and was pleasantly surprised to find that the ads are only on the lock screen and that as soon as I unlock the tablet they disappear immediately.

Here are my pros and cons thus far.

PRO:

Perfect size for Ebooks, and web surfing to alleviate strain on the eyes from my 5" phone display  
nice sturdy casing that gives it a nice heft but still weighs in as one of the lighter tablets on the market

Child Accounts- Amazon allows you to set up this tablet with age restricted access for kids making this a low cost piece of tech that is perfect for school kids and allows mom and dad to ration the amount of time lil Johnny can play Clash of Clans and how much he can hit the ol' Visa card for.

Battery life thus far; wife was on it for about 5 hours last night and battery was at about 46%

Kindle Integration -this goes without saying but having my ebooks and audible books synced to the tablet is awesome and my Kindle books look great