

# GOOGLE CLOUD VISION API

## THE OCR ADVENTURE BEGINS

### REBELS IN THE WILD

*It is a time of turmoil for the galaxy. While the evil Galactic Empire remains strong, the Rebel Alliance continues to fight for freedom.*

*Luke Skywalker struggles with his destiny. He can feel the Force, but lacks the training to become a Jedi Knight. When Doctor Aphra approaches him with an artifact containing the consciousness of an ancient Jedi, Luke accompanies her to the Citadel of Ktath'atn. Overcome with telepathic parasites, Luke is able to overcome their control and free the people of the Citadel along with rebellion leader Princess Leia.*

*Despite this, danger still lurks as the surviving parasites aren't the only ones hunting for Luke and Leia....*

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REBELS IN THE WILD

+Block 2

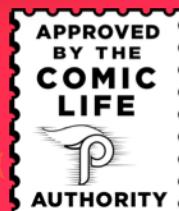
+Paragraph 1

*It is a time of turmoil for the galaxy. While the evil Galactic Empire remains strong, the Rebel Alliance continues to fight for freedom*

+Block 3

+Paragraph 1

*Luke Skywalker struggles with destiny. He can feel the Force but lacks the training to become a Jedi Knight. When Doctor Aphra approaches him*



LONG AGO, IN A GALAXY  
FAR, FAR AWAY...

IMAGE FILES OF DIGITIZED  
COMIC BOOKS, WHETHER JPEG,  
TIFF, PNG, PDF OR OTHER FILE  
TYPES, DO NOT CONTAIN  
EDITABLE TEXT INFORMATION.  
“DOUBLE-KEYING,” THE PROCESS  
OF MANUALLY TRANSCRIBING TEXT  
FROM AN IMAGE SOURCE, IS ONE  
METHOD OF TEXT EXTRACTION.

COMMERCIAL AND OPEN SOURCE  
AFFORDANCES FOR PERFORMING  
OPTICAL CHARACTER RECOGNITION,  
OR OCR, ON IMAGE FILES ARE  
AVAILABLE. THE FREE ONLINE OCR  
SERVICE WE RECOMMEND FOR THIS  
COURSE IS GOOGLE CLOUD VISION  
API, PART OF A SUITE OF  
ADVANCED IMAGE MANIPULATION  
SERVICES THAT GOOGLE LICENSES.

BORING!!!

A DEMO SITE EXISTS:

[HTTPS://CLOUD.GOOGLE.COM/VISION/](https://cloud.google.com/vision/)

if it's good enough for google street view, it's good enough for us...

USING THE DEMO, YOU CAN UPLOAD A COMIC BOOK PAGE FROM YOUR COMPUTER, AND THE SERVICE WILL TRY TO OCR ANY TEXT INFORMATION BURIED IN THE IMAGE FILE. IN THIS CASE, SPEECH BALLOONS, CAPTIONS, AND SOUND EFFECTS - THE OCR TEXT CAN BE COPIED AND PASTED INTO A WORD PROCESSOR, SPREADSHEET OR TEI/CBML XML FILE.

# OCR!

THE ONLY FILE TYPES THAT GOOGLE CLOUD VISION DEMO ACCEPTS IS JPEG (JOINT PHOTOGRAPHIC EXPERTS GROUP), WHICH IS THE FILE FORMAT OF 'PHANTOM LADY #17' COMIC BOOK WE DOWNLOADED FROM THE DIGITAL COMIC MUSEUM SITE, AND PNG (PORTABLE NETWORK GRAPHICS).

## CLOUD VISION API

Derive insight from images with our powerful Cloud

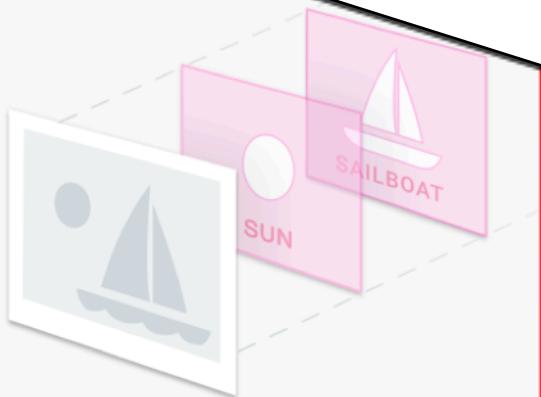


[VIEW DOCUMENTATION](#)

[VIEW MY](#)

## Powerful Image Analysis

Google Cloud Vision API enables developers to **understand the content of an image** by encapsulating **powerful machine learning models** in an easy to use REST API. It quickly **classifies images** into thousands of categories (e.g., "sailboat", "lion", "Eiffel Tower"), **detects individual objects and faces within images**, and finds and reads printed words contained within images. You can build metadata on your image catalog, moderate offensive content, or enable new marketing scenarios through image sentiment analysis. **Analyze images uploaded in the request** or integrate with your image storage on Google Cloud Storage.



Try the API

Drag image file here or  
Browse from your computer



NAVIGATE TO THE GOOGLE CLOUD VISION API DEMO SITE [“TRY THE API”], UPLOAD A JPEG PAGE FROM PHANTOM LADY #17, AND CHECK OUT THE RESULTS. IN MY EXPERIENCE, UNLESS THE OCR IS 98% ACCURATE OR HIGHER, IT IS MORE EFFICIENT TO DOUBLE-KEY THE TEXT CONTENT INTO A WORD PROCESSOR, PROOF IT, AND THEN COPY IT TO A SPREADSHEET OR XML FILE THAN TO TRY TO CLEAN UP AN ERROR-RIDDLED TEXT. OTHER COMIC BOOKS MAY YIELD DRAMATICALLY BETTER OCR RESULTS USING THIS SERVICE.



PROBLEMS WITH USING THE DIGITIZED JPEG IMAGES OF THIS DIGITAL COMIC MUSEUM DOWNLOAD INCLUDE LOW RESOLUTION SCANS, "DIRTY" SCANS FROM A POORLY PRESERVED ORIGINAL, POOR COLOR BLEED IN THE ORIGINAL, AND DIFFICULT-TO-READ HAND-LETTERING IN THE BALLOONS AND CAPTIONS. GOOGLE CLOUD VISION API DOESN'T "UNDERSTAND" HOW SPEECH BALLOONS OPERATE, SO THE TEXT IN CONTIGUOUS BALLOONS WILL BE READ AS SINGLE LINES, TOP TO BOTTOM, NULLIFYING THE USEFULNESS OF THE OCR.

# OGR!

Properties	Safe Search
+Block 3	
+Paragraph 1	BEITY ! THEVEKILLEO . HER ! AND DON ! . . . S
+Paragraph 2	WHAT ' THAT CARD ?
+Block 4	
+Paragraph 1	HOP M MOT TOO LATE TO SETTLE SOME CROOK ' S HASH
+Block 5	
+Paragraph 1	AT LEAST OON ' s BREATHING ! W HATS THIS ACME PROTECTIVE AS SOCIATION THE SAME CROOKS . N ICE OF THEM TO PUT THEIR PHON E NUMBER DOWN HERE .

A WORD TO THE WISE = DEMO SITES  
ARE USUALLY SET UP WITH HARD  
LIMITS ON HOW MANY TIMES A  
SINGLE COMPUTER CAN USE THE  
SERVICE IN A SINGLE SESSION --  
IF YOU TRY TO OCR, SAY, SO  
PAGES AT A TIME, THE SERVICE  
MAY START BLOCKING YOUR IP  
ACCESS!

Faces Labels Web Text **Document** Properties Safe Search

+Block 3  
+Paragraph 1  
BEITY ! THE EveKILLEO . HER ! AND  
DON ! . . . . S

+Paragraph 2  
WHAT ' THAT CARD ?

+Block 1  
+Paragraph 1  
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Phantom\_Lady\_017-06.jpg