Comic Penciler Classification

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Agenda

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2. Problem Statement
3. Data Gathering
4. Exploratory Data Analysis
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6. Conclusion
7. Future Work

What is a Penciler?

A penciler, in collaboration with a writer, does first rendering of stories to visual art-form (historically done on paper with pencil, hence the term).

These days people still use paper and pencil then Photoshop, or many other forms/iterations.

Problem Statement

Sometimes old comic books are lost, or not in a well-preserved state.

If one or more panel images are provided to a model, can it provide some clues to a person as to who the penciler of the comic is likely to be?

Data Gathering

Files (FTP):

- Digital Comics Museum (FTP access with donation)

Meta Data (scraping):

- Digital Comics Museum
- Grand Comics Database

Data Gathering

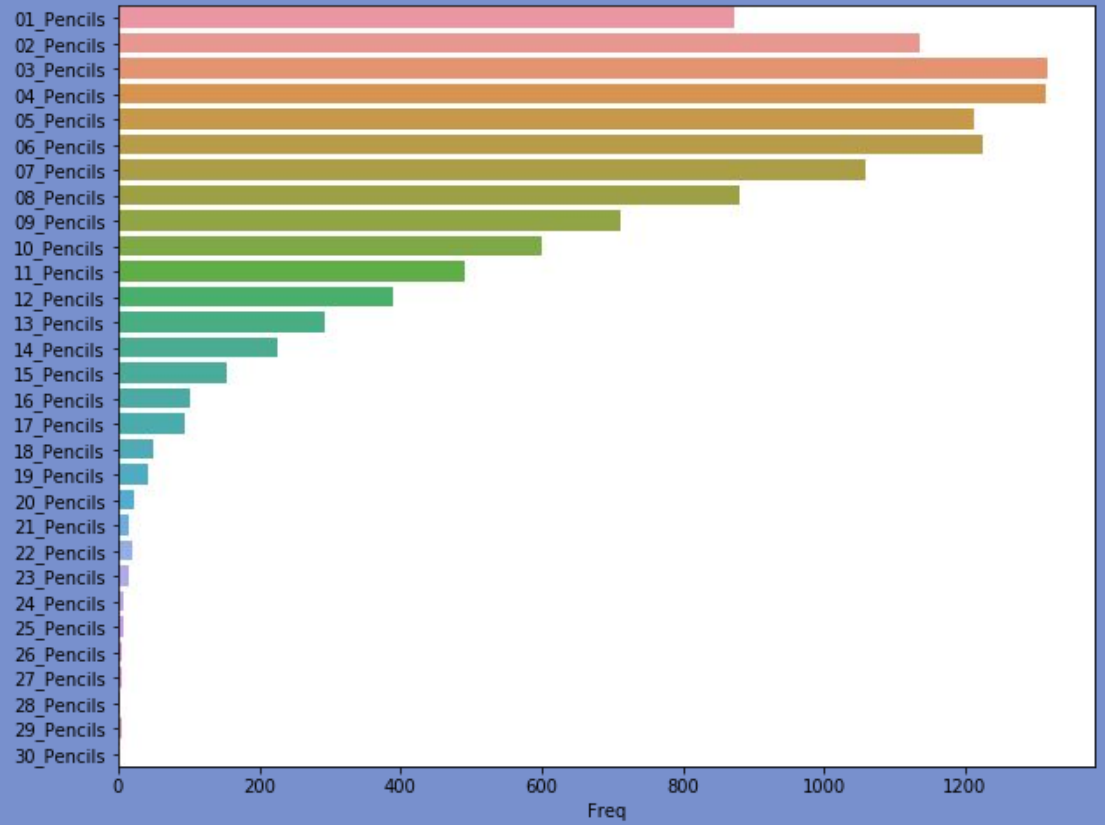
- Scraping is a messy process.
- Downloaded files from 17 publishers (including Ace_Comics, Chesler_Comics, Fawcett_Comics, Fiction_House, Orbit, Quality) in Digital Comics Museum.
- Prioritized Grand Comics Database information.

Exploratory Data Analysis

	Frequency
Robert Webb	4393.43
Jack Cole	3758.66
Reed Crandall	3460.00
Paul Gustavson	2993.00
Irving Novick	2883.50
Charles Sultan	2575.64
C. C. Beck	2456.41
Klaus Nordling	2446.00
Alex Blum	2424.00
Harry Sahle	2149.67

	Frequency
Bill Ward	1963.00
Lou Fine	1951.80
Al Bryant	1945.67
Al Fagaly	1861.83
Pete Riss	1797.64
Walt Kelly	1789.00
Bob Powell	1756.10
Dan Zolnerowich	1741.25
Henry Kiefer	1735.15
Will Eisner	1734.76

Exploratory Data Analysis



Obstacles

- Alignment of Pages and Pencilers
- Failure of extraction
- Different number of pages for files than listed in meta data (multiple versions of front/back cover)
- Comic book meta data logs portions of each page

Solution

Manual Labeling against

MetaData

Modeling

Grey-scaled, cropped, resized images and used CNN.

60% validation accuracy on 200 images.