

Automatic Handwriting Recognition : exercices

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Choose your document

- The data is in our repo (and the slides too) :
`https://github.com/ciham-htr/SEHM_HTR_2024`
- The first step is to download the whole repository.

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Choose your document

- The data is in our repo (and the slides too) :
https://github.com/ciham-htr/SEHM_HTR_2024
- You have the choice between :
 - two manuscripts :
 - the *General Estoria* (13th century)
 - the *Regimiento de los Príncipes* (1374)
 - the *Libro de la Montería de Alfonso* (15th century)
 - and two print books :
 - the *Rhétorique* by Fichet (1471).
 - the *Gargantua* printed by François Juste (1534)

Project creation

 eScriptorium
 [Home](#)
[Contact](#)



[My Projects](#)
[My Models](#)
[Hello Matthias](#)


Create new Project

Project creation

The screenshot displays the eScriptorium web application interface. At the top, a dark navigation bar contains the eScriptorium logo, links for Home and Contact, a search bar with the text "Search in Matthias", and user-specific links for My Projects, My Models, and Hello Matthias. Below the navigation bar, a light gray header area shows the user's name "Matthias" and tabs for Documents, Edit, and Reports. A green button labeled "Create new Document" and two social media icons are also present. The main content area features a table with the following headers: Select, Preview, Name, Owner, Last modified, Image count, Tags, and Actions. The table body is currently empty. In the bottom right corner of the main content area, there is a small purple circular badge with the number "0".

Select	Preview	Name	Owner	Last modified	Image count	Tags	Actions
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Document creation

 eScriptorium
 Home Contact

All I
 Search in

 My Projects My Models Hello Matthias

Description
 Ontology
 Images
 Edit
 Models
 Reports

Rabelais

Left to right

The read direction describes the order of the elements in the document, in opposition with the text direction which describes the order of the words in a line and is set by the script.

Baseline

The position of the line relative to the polygon.

☐ Show confidence visualizations

If checked, enable toggling on and off colorized overlays for automatic transcription (OCR/HTR) confidences.

Metadata

Key	Value

Create

0

Document creation

The screenshot displays the eScriptorium web application interface. At the top, the header includes the eScriptorium logo, navigation links for Home and Contact, a search bar with a dropdown menu set to 'All I' and a search button, and user information for 'My Projects', 'My Models', and 'Hello Matthias'. Below the header, a navigation bar contains tabs for Description, Ontology, Images, Edit, Models, Reports, and Rabelais. The main workspace is a large dashed blue rectangle with the text 'Drop images here or click to upload.' and a small upload icon. At the bottom of the workspace, there are several buttons: 'Select all', 'Unselect all', 'Selected 0/0', 'Import', 'Export', 'Binarize', 'Segment', 'Transcribe', and 'Align'. A small purple circular icon with the number '0' is located in the bottom right corner of the workspace.

Import

The screenshot displays the eScriptorium web application interface. At the top, the header includes the eScriptorium logo, navigation links for Home and Contact, a search bar with the text "Search in Rabelais", and user information: "My Projects", "My Models", and "Hello Matthias". Below the header, a navigation bar contains tabs for Description, Ontology, Images, Edit, Models, Reports, and Rabelais. The main content area features a large dashed blue box with the text "Drop images here or click to upload." Below this box, there are buttons for "Select all", "Unselect all", and "Selected 0/0". To the right of these buttons is an "Import" button with a dropdown menu. The dropdown menu lists four options: "Images (IIIF)", "Images (PDF)", "Transcriptions (XML)", and "METS (URI/ZIP)". To the right of the "Import" button is an "Export" button. Further right, there are buttons for "Binarize", "Segment", "Transcribe", and "Align". In the bottom right corner, there is a small purple circular icon with the number "0".

eScriptorium Home Contact

All I Search in Rabelais

My Projects My Models Hello Matthias

Description Ontology Images Edit Models Reports Rabelais

Drop images here or click to upload.

Select all Unselect all Selected 0/0

Import Export

- Images (IIIF)
- Images (PDF)
- Transcriptions (XML)
- METS (URI/ZIP)

Binarize Segment Transcribe Align

0

Import

File Upload

🕒 Récents

🏠 Dossier personnel

📁 Bureau

📄 Documents

📷 Images

🎵 Musique

⬇️ Téléchargements

📺 Vidéos

📁 sentence_tokenizer

📁 CV

📁 Cours_et_ formations

📁 admin

📁 projets

📁 Communications_et_articles

📁 Reproductions

A navigation breadcrumb bar showing the path: mgl > Bureau > Travail > Cours_et_ formations > SEHM_2024_HTR > htr_data. Each item is in a button-like box with a small icon (back, home, folder, etc.).


Nom


Taille

Modifié ▲

📄 9_115d5_default.pdf	979,0 ko	12:54
📄 8_8f0c3_default.pdf	962,0 ko	12:54
📄 7_a283c_default.pdf	939,8 ko	12:54
📄 6_dbf4b_default.pdf	985,8 ko	12:54
📄 10_c3cf3_default.pdf	964,4 ko	12:54


Import


 eScriptorium
 [Home](#) [Contact](#)

All 1 ▾ Search in Rabelais 

[My Projects](#) [My Models](#) [Hello Matthias ▾](#)

[Description](#) [Ontology](#) [Images](#) [Edit](#) [Models](#) [Reports](#) [Rabelais](#)


Import done! 


 Drop images here or click to upload.




[Select all](#) [Unselect all](#) Selected 0/1

[Import ▾](#) [Export](#)

[Binarize](#) [Segment](#) [Transcribe](#) [Align](#)





Image(s) selection

←
Description
Ontology
Images
Edit
Models
Reports
Rabelais

Import done!

Drop images here or click to upload.

Select all
Unselect all
Selected 1/1
Import
Export
Binarize
Segment
Transcribe
Align

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Tiling system in eScriptorium

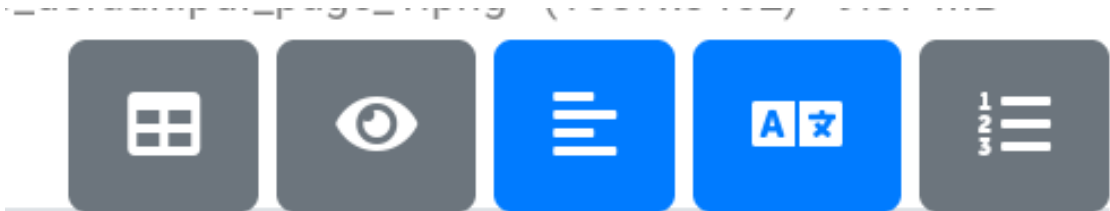
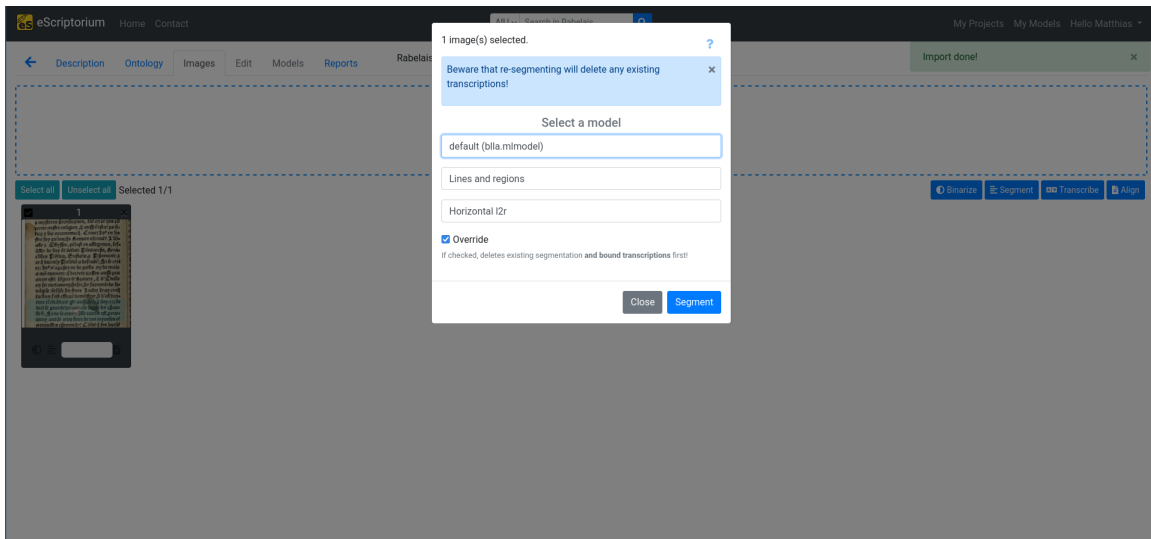


Figure – Left to right : metadata, source image, segmentation, transcription, text

- Each icon toggles a tile with a specific function
- We will be using only the three last tiles : « segmentation » and « transcription » for correcting the text, « text » for correcting the line order and copying the transcription to the « manual » session

Zones and lines segmentation



Zones and lines segmentation correction

- Sometimes the zones and/or lines segmentation is incorrect and needs to be modified manually
- The « segmentation » tile is to be active to correct the zones and lines.

Some useful tips

- There are two modes in the segmentation tile :
 - Regions
 - Lines
- You can switch mode by pressing the R button.

Some useful tips

- Left click creates an object
- Right click + shift moves the image
- In lines mode,
 - you can either create a line by clicking once and then again in another location of the image ;
 - Or create a continuous line by holding down the left mouse button and moving the mouse (less useful).
- C toggles the scissors mode, to cut lines or zones
- L toggles the order mode, to check if the lines are in the good order.

Some useful tips

- The interface uses some keyboard shortcuts that are common to a lot of softwares :
- Shift toggles the zone selection : you can select a portion of line or zone, to modify their position
- Once you've selected some point, you can move them together holding CTRL and moving the cursor.

Transcription

The screenshot displays the eScriptorium web application interface. At the top, there's a navigation bar with 'eScriptorium', 'Home', and 'Contact'. Below it, a menu bar includes 'Description', 'Ontology', 'Images', 'Edit', 'Models', 'Reports', and 'Rabelais'. The main workspace is divided into two sections. The left section shows a thumbnail of a manuscript page with the number '1' and a 'Selected 1/1' indicator. The right section contains a large dashed box for the main image, with buttons for 'Binarize', 'Segment', 'Transcribe', and 'Align' at the bottom right. A modal dialog is centered on the screen, titled '1 image(s) selected.' with a help icon. It contains a warning message: 'Make sure that the segmentation is good before going forward because resegmenting will delete all bound transcriptions.' Below this, there are two selection steps: 'Select a model' with a dropdown showing 'CATMuS Manu McFondue (Manu McFrench v4) Gabay et al.', and 'Select a transcription' with a dropdown showing '- New -'. At the bottom of the modal are 'Close' and 'Transcribe' buttons. On the far right, there are two green status bars: 'Import done!' and 'Segmentation done!', both with close icons.

Copy text to manual transcription

- It is a good practice to correct the transcription in a new transcription session, to avoid overwriting the data

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Correction of transcription

⏮
⏭
🗂
Line #3
✕



poir certaind' estre faiets efeors avtesp à

by mgillelevenson (kraken:CATMuS Manu McFondue (Manu McFrench v4) Gabay et al. (DOI: 10.5281/zenodo.10886224)) on Sun Mar 31 2024 11:56:02 GMT+0100

Export the transcription

The screenshot shows the eScriptorium web application interface. At the top, there's a navigation bar with 'eScriptorium', 'Home', and 'Contact'. Below it, a search bar and user profile 'Hello Matthias' are visible. The main area has tabs for 'Description', 'Ontology', 'Images', 'Edit', and 'Model'. A large dashed box indicates the main workspace. On the left, a thumbnail of a manuscript page is shown with a zoom level of 100%. A modal dialog box is open in the center, titled '1 image(s) selected.' with a question mark icon. Inside the dialog, there's a placeholder for the image, a text input field containing 'kraken:CATMuS Manu McFondue (Manu McFrench v4) Gabe', and another empty text input field labeled 'ALTO'. Below these, there's a checkbox 'Include images' with a note: 'Will significantly increase the time to produce and download the export.' Under 'Region types', several checkboxes are checked: 'Title', 'Main', 'Commentary', 'Illustration', 'text', '(Undefined region type)', and '(Orphan lines)'. At the bottom of the dialog are 'Close' and 'Export' buttons. In the bottom right corner of the application, there's a purple circle with the number '0'.

Export the transcription

- Be sure to select the correct transcription session (manual) and format

Guided exercise

- 1 The data is in our repo (and the slides too) :
https://github.com/ciham-htr/SEHM_HTR_2024. Please start by downloading the whole repo that contains the slides too.
- 2 Log in to the server : <https://escriptorium.inria.fr>
 - login : apinche_formation - password : training1234
- 3 Create a new project : YOURNAME
- 4 In your project, create a new document
- 5 Load 1 pages of the source
- 6 Apply a segmentation model (blla.mlmodel)
- 7 Correct the segmentation
- 8 Apply a transcription model
- 9 Make necessary corrections
- 10 Export the data

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Exercise (2)

- In your project file create a new document : DOCUMENTID
 - Download 2 images from Gallica :
 - National Library of France. Department of Manuscripts. NAF 23686 (Lives of saints in French, <https://gallica.bnf.fr/ark:/12148/btv1b8446925z>)(13th c. manuscript in french)
 - National Library of France. Department of Performing Arts, RESERVE 4-RF-87512 (Latin, Legenda Aurea), <https://gallica.bnf.fr/ark:/12148/bpt6k1281158q> (gothic print in latin, 15th c.)
 - Lyon Public Library, FC011, <https://gallica.bnf.fr/ark:/12148/bpt6k79207j/f36.item> (print in french, 16th c.)

Exercise (2)

- ① Import a new image in eScriptorium
- ② Apply a segmentation model (regions, then baselines)
- ③ Apply an HTR model (Use a pre-existing model)
- ④ Correct the transcription
- ⑤ Export the results :
 - Export the transcription as txt
 - Export the transcription as Alto XML