

Automatic Handwriting Recognition : exercices

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Exercices, April 5th, 2024, Lyon

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Guided exercise

- 1 Log in to the server : `https://escriptorium.inria.fr`
 - login : `apinche_formation` - password : `training1234`
- 2 Create a new project : `YOURNAME`
- 3 In your project, create a new document :
- 4 Load 4 pages of the source : `ADD document`
- 5 Apply a segmentation model (`blla.mlmodel`)
- 6 Correct the segmentation
- 7 Apply a transcription model : **ADD name of the model**
- 8 Make necessary corrections
- 9 Export the data


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Choose your document


- The data is in our repo : https://github.com/matgille/SEHM_2024_HTR
- You have the choice between the *General Estoria* (13th century), the *Regimiento de los Príncipes* (1374), the *Libro de la Montería de Alfonso* (15th century), and the *Gargantua* (1534)

Project creation


 eScriptorium


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

Search in all your projects 


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

My Projects



Tests	mgillelevenson	1 document.
Q_finetuning	mgillelevenson	3 documents.
HTRomance	tclerice	148 documents. 

Project creation

 eScriptorium

HomeContact

Search in Matthias

My ProjectsMy ModelsHello Matthias


MatthiasDocumentsEditReports

Create new Document

Select	Preview	Name	Owner	Last modified	Image count	Tags	Actions
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0

Document creation

 eScriptorium
 Home Contact

All | 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 the text "All | Search in Rabelais", and user information: "My Projects", "My Models", and "Hello Matthias". Below the header, a horizontal menu contains tabs for "Description", "Ontology", "Images", "Edit", "Models", "Reports", and "Rabelais". The "Images" tab is currently active. The main workspace is a large area with a dashed blue border, containing the instruction "Drop images here or click to upload." Below this workspace, there is a toolbar with buttons for "Select all", "Unselect all", "Selected 0/0", "Import", "Export", "Binarize", "Segment", "Transcribe", and "Align". In the bottom right corner of the workspace, there is a small purple circular icon with the number "0".

Import


 eScriptorium

HomeContact

All I ▾Search in Rabelais

My ProjectsMy ModelsHello Matthias ▾

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



[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

⏪ 🏠 mgl 📁 Bureau Travail Cours_et_formations SEHM_2024_HTR htr_data ⏩


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 I ▾ 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

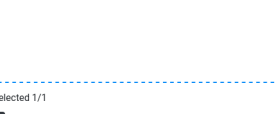
Binarize

Segment

Transcribe

Align

1



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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

The screenshot shows the eScriptorium web interface. A modal dialog box is open in the center, titled "1 image(s) selected." with a question mark icon. Inside the dialog, there is a warning box that says "Beware that re-segmenting will delete any existing transcriptions!". Below this, the "Select a model" section has a dropdown menu set to "default (blla.mlmodel)". Underneath, there are two input fields: "Lines and regions" and "Horizontal l2r". A checkbox labeled "Override" is checked, with a note below it: "If checked, deletes existing segmentation and bound transcriptions first!". At the bottom of the dialog are "Close" and "Segment" buttons. The background interface shows a navigation bar with "Description", "Ontology", "Images", "Edit", "Models", "Reports", and "Rabais". A top right bar shows "My Projects", "My Models", and "Hello Matthias". A green notification bar at the top right says "Import done!". On the left, there are buttons for "Select all", "Unselect all", and "Selected 1/1". A small thumbnail of a manuscript page is visible in the bottom left corner. On the right, there are buttons for "Binarize", "Segment", "Transcribe", and "Align".

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 scissor 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 shows the eScriptorium web interface. A modal dialog is open in the center, titled "1 image(s) selected." with a question mark icon. The dialog contains the following text:

Make sure that the segmentation is good before going forward because resegmenting will delete all bound transcriptions.

Select a model

CATMuS Manu McFondue (Manu McFrench v4) Gabay et al.

Select a transcription

- New -

At the bottom of the dialog are "Close" and "Transcribe" buttons.

The background interface shows the "Images" tab selected, with a manuscript image displayed. To the right, there are two green status bars: "Import done!" and "Segmentation done!". At the bottom right, there are buttons for "Binarize", "Segment", "Transcribe", and "Align".

Copy text to manual transcription

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

A set of small navigation icons typically found in Beamer presentations, including symbols for back, forward, search, and other slide controls.



Export the transcription

The screenshot shows the eScriptorium web application interface. The main window displays a manuscript image with a transcription overlay. A modal dialog box is open, titled "1 image(s) selected.", allowing the user to configure the export of the transcription.

Dialog Box Configuration:

- Title:** (PLACEHOLDER)
- Text:** kraken:CATMuS Manu McFondue (Manu McFrench v4) Gabz
- ALTO:** (Empty field)
- Include images:** ☐ (Unchecked)
- Region types:**
 - ☒ Title
 - ☒ Main
 - ☒ Commentary
 - ☒ Illustration
 - ☒ text
 - ☒ (Undefined region type)
 - ☒ (Orphan lines)

Buttons: Close, Export

Background Interface:

- Navigation:** Home, Contact, All, Search in Database
- User:** My Projects, My Models, Hello Matthias
- Tools:** Binarize, Segment, Transcribe, Align
- Selection:** Select all, Unselect all, Selected 1/1
- Zoom:** 100%

Export the transcription

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

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Exercise (1)

- 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 between 2 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