





Redactify Lux — Smart Document Classification & Redaction

Illuminate your privacy. Automate your compliance.

Redactify Lux is an AI-powered document automation tool that classifies PDF documents and redacts sensitive information using a hybrid approach of machine learning and regex. Designed with modularity and privacy-first principles, it enables secure document processing for legal, financial, and enterprise workflows.

Key Features

-  Document Classification — Automatically detects type (e.g., NDA, Invoice, Shipping Order)
-  Hybrid Redaction — Redacts sensitive data using ML-based NER + regex
-  ML & OCR Powered — Uses NLP and OCR to extract and understand content
- Text & PDF Output — Returns redacted data as plain text or downloadable PDF
-  Modern Frontend — Drag & drop UI with real-time feedback and dual-view preview





Tech Stack

- Backend: Python, FastAPI, Scikit-learn, spaCy, PyMuPDF
- Frontend: React, Material UI (MUI)
- PDF Redaction: Layout-aware with PyMuPDF & FPDF
- Classification: Trained on real-world-like documents with high accuracy

API Endpoints

- ♦ `POST /classify/`
 - Upload a PDF
 - Returns: Classification label, character count, etc.
- ♦ `POST /redact/`
 - Upload a PDF
 - Query param: `output_format=text|pdf|both`
 - Returns: Redacted text and/or redacted PDF
- ♦ `POST /process/`
 - Upload a PDF
 - Performs both classification & redaction
 - Returns: classification label, redacted text, redacted entities, and optional PDF download

Demo UI Highlights

-  Drag & drop interface
-  Extracted and redacted text shown side-by-side
-  Download redacted PDF instantly
-  Responsive and modern React design

About

Created as a demo-ready AI-powered tool to showcase intelligent document automation. Ideal for integration or pilot use in firms focused on compliance, legal tech, or enterprise automation.

> Redactify Lux is not here to replace your enterprise tools — it's the agile sandbox to empower innovation teams, support lean client pilots, and seed future-ready IP.

Redactify Lux

Illuminate Your Privacy

Drag or click to upload PDF


 Choose PDF

SUBMIT PDF

Redactify Lux

Illuminate Your Privacy

Drag or click to upload PDF

 Choose PDF

Selected file: sample_invoice.pdf

SUBMIT PDF

Uploaded pdf are classified based on ml model and output are shown ad extracted text, redacted text and original pdf and redacted pdf

Classification: INVOICES

Extracted vs Redacted Text:

Extracted Text:

Invoice: 23565
sdd comp
Issued on: 2025-05-21
Due by: 2025-06-20
From To
sdd comp american jr
john alan ss
Elm Street Suite 456 5244 Heritage Hills Boulevard
98765 Kabul L5R 3G9 Mississauga
South Africa Algeria
ohn.doe@sddcomp.com alan@ammbh.com
14442
Product Quantity Unit Price Tax Total
Education & Training 2 \$ 75.00 \$ 150.00
Medical Service
3 \$ 40.00 10% \$ 132.00
REERER

Invoice Summary
Subtotal \$ 270.00
Tax \$ 12.00
Total \$ 282.00
1 / 1

Redacted Text:

Invoice: [#####]
sdd comp
Issued on: [#####]
Due by: [#####]20
From [#####]sdd comp [#####] [#####] alan ss
Elm Street Suite [#####] 5244 [#####]
[#####] Kabul [#####] [#####]
[#####] [#####]
[#####] [#####]
[#####]
Product Quantity Unit Price Tax Total
Education & Training 2 \$ [#####] \$ [#####]
Medical Service
3 \$ [#####] [#####] \$ [#####]
REERER

Invoice Summary
Subtotal \$ [#####]
Tax \$ [#####]
Total \$ [#####]
[#####] / [#####]

Original vs Redacted PDF:

Original PDF

Original PDF

Invoice: 23565

Issued on: 2025-05-21
Due by: 2025-06-20

From: sdd comp, john, Elm Street Suite 456, 98765 Kabul, South Africa, ohn.doe@sddcomp.com, 14442

To: american jr, alan ss, 5244 Heritage Hills Boulevard, L5R 3G9 Mississauga, Algeria, alan@ammbh.com

Product	Quantity	Unit Price	Tax	Total
Education & Training	2	\$ 75.00		\$ 150.00
Medical Service	3	\$ 40.00	10%	\$ 132.00

REERER

Invoice Summary

Subtotal	\$ 270.00
Tax	\$ 12.00
Total	\$ 282.00

Redacted PDF

Redacted PDF

Invoice: 23565

Issued on: [REDACTED]
Due by: [REDACTED]

From: sdd comp, [REDACTED], Elm Street Suite 456, 98765 Kabul, [REDACTED], 14442

To: american jr, alan ss, 5244 Heritage Hills Boulevard, L5R 3G9 Mississauga, Algeria, alan@ammbh.com

Product	Quantity	Unit Price	Tax	Total
Education & Training	2	\$ 75.00		\$ 150.00
Medical Service	3	\$ 40.00	10%	\$ 132.00

REERER

Invoice Summary

Subtotal	\$ 270.00
Tax	\$ 12.00
Total	\$ 282.00

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Redactify Lux

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Drag or click to upload PDF

Choose PDF

Selected file: Template-NDA-2-way-final-1-Dec-2022.pdf

SUBMIT PDF

Classification: NON DISCLOSURE DOC

Extracted vs Redacted Text:

Extracted Text:

MUTUAL NON-DISCLOSURE AGREEMENT
PARTIES: McMaster University ('University')
1280 Main Street West
Hamilton, ON L8S 4L8
Company/Organization name('Company')
Company/organization address
DATE: March 12,2019 ('Effective Date')
In consideration of the mutual covenants set out in this Agreement and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by each of the Parties), the Parties agree as follows:
1. DEFINITION OF CONFIDENTIAL INFORMATION
Confidential Information means any information disclosed by one party (the 'Discloser') to the other (the 'Recipient') relating directly or indirectly to Name of Technology/Project, file # which is identified by the Discloser, either orally or in writing, as confidential, either at the time of disclosure or, if disclosed orally, confirmed in writing within thirty (30) days following the original disclosure.
2. EXCEPTIONS TO CONFIDENTIAL INFORMATION

Redacted Text:

MUTUAL NON-DISCLOSURE AGREEMENT
PARTIES: [#####] ('[#####]')
1280 Main Street [#####]
[#####], ON [#####]
Company/Organization name('Company')
Company/organization address
DATE: [#####] ('Effective Date')
In consideration of the mutual covenants set out in this Agreement and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by each of the Parties), the Parties agree as follows:
[#####]. DEFINITION OF CONFIDENTIAL INFORMATION
Confidential Information means any information disclosed by one party (the 'Discloser') to the other (the 'Recipient') relating directly or indirectly to Name of Technology/Project, file # which is identified by the Discloser, either orally or in writing, as confidential, either at the time of disclosure or, if disclosed orally, confirmed in writing within [#####] following the original disclosure.
[#####]. EXCEPTIONS TO CONFIDENTIAL INFORMATION

Original vs Redacted PDF:

Original PDF

MUTUAL NON-DISCLOSURE AGREEMENT

PARTIES: McMaster University (University)
1280 Main Street West
Hamilton, ON L8S 4L8

Company/Organization name: Company
Company/organization address

DATE: March 12, 2019 (Effective Date)

In consideration of the mutual covenants set out in this Agreement and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by each of the Parties), the Parties agree as follows:

1. DEFINITION OF CONFIDENTIAL INFORMATION
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2. EXCEPTIONS TO CONFIDENTIAL INFORMATION
This Agreement does not apply to information that:
i. was available to the public at the time of disclosure, or subsequently became available to the public without fault of Recipient;
ii. was known to Recipient at the time of disclosure or was independently developed by Recipient, provided there is adequate documentation to confirm such prior knowledge or independent development;
iii. was received by Recipient from a third party and Recipient was not aware that the third party had a duty of confidentiality to Discloser in respect of the information;
iv. is used or disclosed by Recipient with Discloser's prior written approval; or
v. is required to be disclosed by law, provided that Recipient gives Discloser sufficient prior written notice of any such disclosure to allow Discloser to contest the disclosure. Any action taken by Discloser to contest the disclosure must not compromise the obligations of Recipient under the order to disclose or cause Recipient to be subject to any fine, penalty or prosecution.

3. DESIGNATED REPRESENTATIVES
Each party designates a representative for coordinating receipt, release and delivery of Confidential information, which for the University will be Name of Principal Investigator and/or Technology Transfer Office representative and for Company Name of designated representative for company, or another individual(s) as the party may designate in writing to the other party.

4. USE OF CONFIDENTIAL INFORMATION
Recipient may only use the Confidential Information for the purpose of type of purpose or a research collaboration and not for any commercial purpose (Permitted Purpose). Recipient must not use the Confidential Information for any other purpose without the prior written approval of Discloser.

5. NON-DISCLOSURE
Recipient must keep the Confidential Information in confidence. Recipient may only disclose the Confidential Information to its employees, directors, officers, agents, students (in University's case) and

McMaster University

Redacted PDF

MUTUAL NON-DISCLOSURE AGREEMENT

PARTIES: [REDACTED]
1280 Main Street [REDACTED]
[REDACTED] ON [REDACTED]
[REDACTED] address

DATE: [REDACTED] (Effective Date)

In consideration of the mutual covenants set out in this Agreement and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by each of the Parties), the Parties agree as follows:

1. DEFINITION OF CONFIDENTIAL INFORMATION
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2. EXCEPTIONS TO CONFIDENTIAL INFORMATION
This Agreement does not apply to information that:
i. was available to the public at the time of disclosure, or subsequently became available to the public without fault of [REDACTED];
ii. was known to [REDACTED] at the time of disclosure or was independently developed by [REDACTED], provided there is adequate documentation to confirm such prior knowledge or independent development;
iii. was received by [REDACTED] from a third party and [REDACTED] was not aware that the third party had a duty of confidentiality to [REDACTED] in respect of the information;
iv. is used or disclosed by [REDACTED] with [REDACTED] prior written approval; or
v. is required to be disclosed by law, provided that [REDACTED] gives [REDACTED] sufficient prior written notice of any such disclosure to allow [REDACTED] to contest the disclosure. Any action taken by [REDACTED] to contest the disclosure must not compromise the obligations of [REDACTED] under the order to disclose or cause [REDACTED] to be subject to any fine, penalty or prosecution.

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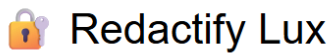
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McMaster University

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Drag or click to upload PDF

Choose PDF

Selected file: order_10252.pdf

SUBMIT PDF

Classification: SHIPPING ORDERS

Extracted vs Redacted Text:

Extracted Text:

Order ID: 10252

Shipping Details:

Ship Name: Suprêmes délices

Ship Address: Boulevard Tirou, 255

Ship City: Charleroi

Ship Region: Western Europe

Ship Postal Code: B-6000

Ship Country: Belgium

Customer Details:

Customer ID: SUPRD

Customer Name: Suprêmes délices

Employee Details:

Employee Name: Margaret Peacock

Shipper Details:

Shipper ID: 2

Shipper Name: United Package

Order Details:

Order Date: 2016-07-09

Shipped Date: 2016-07-11

Products:

Product: Sir Rodney's Marmalade

Quantity: 40

Redacted Text:

Order ID: [#####]

Shipping Details:

Ship Name: [#####]

Ship Address: [#####], [#####]

Ship City: [#####]

Ship Region: [#####]

Ship Postal Code: B-6000

Ship Country: [#####]

Customer Details:

Customer ID: [#####]

Customer Name: [#####]

Employee Details:

Employee Name: [#####]

Shipper Details:

Shipper ID: [#####]

Shipper Name: [#####]

Order Details:

Order Date: [#####]

Shipped Date: [#####]

Products:

Product: Sir Rodney's Marmalade

Quantity: [#####]

Original vs Redacted PDF:

Original PDF

Order ID: 10252

Shipping Details:

Ship Name: Suprêmes délices

Ship Address: Boulevard Tirou, 255

Ship City: Charleroi

Ship Region: Western Europe

Ship Postal Code: B-6000

Ship Country: Belgium

Customer Details:

Customer ID: SUPRD

Customer Name: Suprêmes délices

Employee Details:

Employee Name: Margaret Peacock

Shipper Details:

Shipper ID: 2

Shipper Name: United Package

Order Details:

Order Date: 2016-07-09

Shipped Date: 2016-07-11

Products:

Product: Sir Rodney's Marmalade

Quantity: 40

Unit Price: \$4.5

Total: 2592.0

Product: Gelost

Quantity: 25

Unit Price: 2.0

Total: 50.0

Product: Camembert Pienot

Quantity: 40

Redacted PDF

Order ID: 10252

Shipping Details:

Ship Name: [REDACTED]

Ship Address: [REDACTED], 255

Ship City: [REDACTED]

Ship Region: [REDACTED]

Ship Postal Code: [REDACTED]

Ship Country: [REDACTED]

Customer Details:

Customer ID: [REDACTED]

Customer Name: [REDACTED]

Employee Details:

Employee Name: [REDACTED]

Shipper Details:

Shipper ID: 2

Shipper Name: [REDACTED]

Order Details:

Order Date: [REDACTED]

Shipped Date: [REDACTED]

Products:

Product: Sir Rodney's Marmalade

Quantity: 40

Unit Price: [REDACTED]

Total: [REDACTED]

Product: Gelost

Quantity: 25

Unit Price: [REDACTED]

Total: [REDACTED]

Product: Camembert Pienot

Quantity: 40

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