

Artificial Intelligence (AI), Robotic Process Automation (RPA), PDF Document Processing

Henry Sal
President Computing System Innovations

Today's Agenda

- The general use case – document intake automation
- AI in Action
 - Full automation – “lights out”
 - Semi automated – manual validation
 - Adobe email automation
- Machine learning overview
- Data extraction
- Online learning

Intellidact. AI™



SHARON R. BOCK
Clerk & Comptroller
Palm Beach County

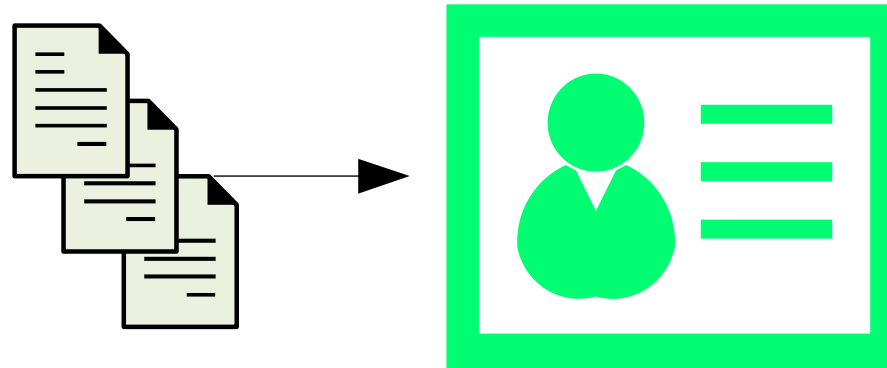
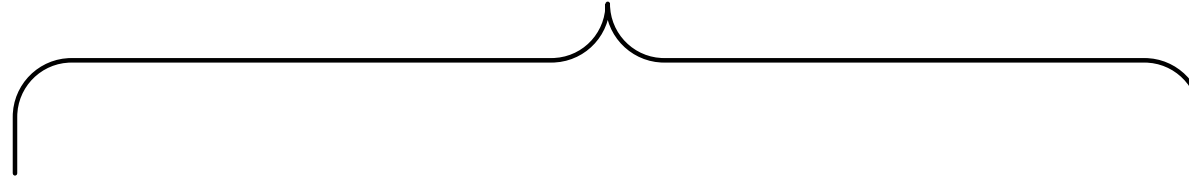
CIO

**WINNER OF
DIGITAL
EDGE50
AWARDS**

The Palm Beach Clerk and Recorders use of **Intellidact AI** to provide customers with faster, increasingly efficient service earned the office national recognition from **CIO Magazine** as a 2019 Digital Edge 50 award winner.

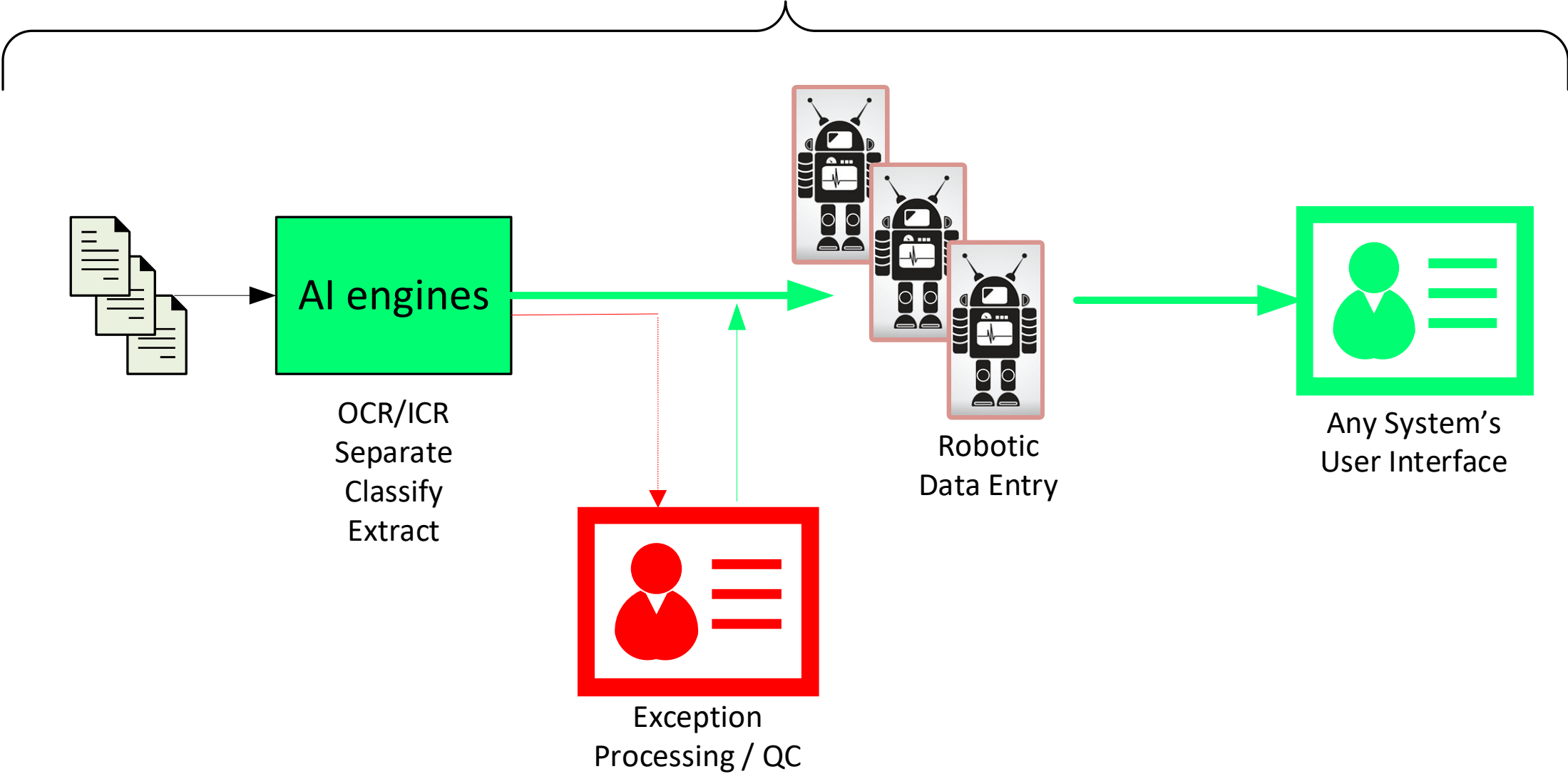
The prestigious award for the Clerk's office followed a highly competitive nationwide contest. The honor is frequently given to Fortune 500 companies that execute digital transformation initiatives with a significant, measurable business impact.

Manual Document Intake



Quality Control
Any System's
User Interface

Document Intake Automated





Show videos 1 through 4

Lights out (arrest affidavit & e-filing), semi-automated, adobe email bot



How to find data

RE's Fragile

Requires coding skills

Beyond human capabilities

Regular Expressions

```
([C][A][F][L][V][A]<K california 90><K florida 95><K virginia 90>)[ ]?[0-9]{3}[ ]?[0-9]{2}[ ]?[0-9]{4}
```

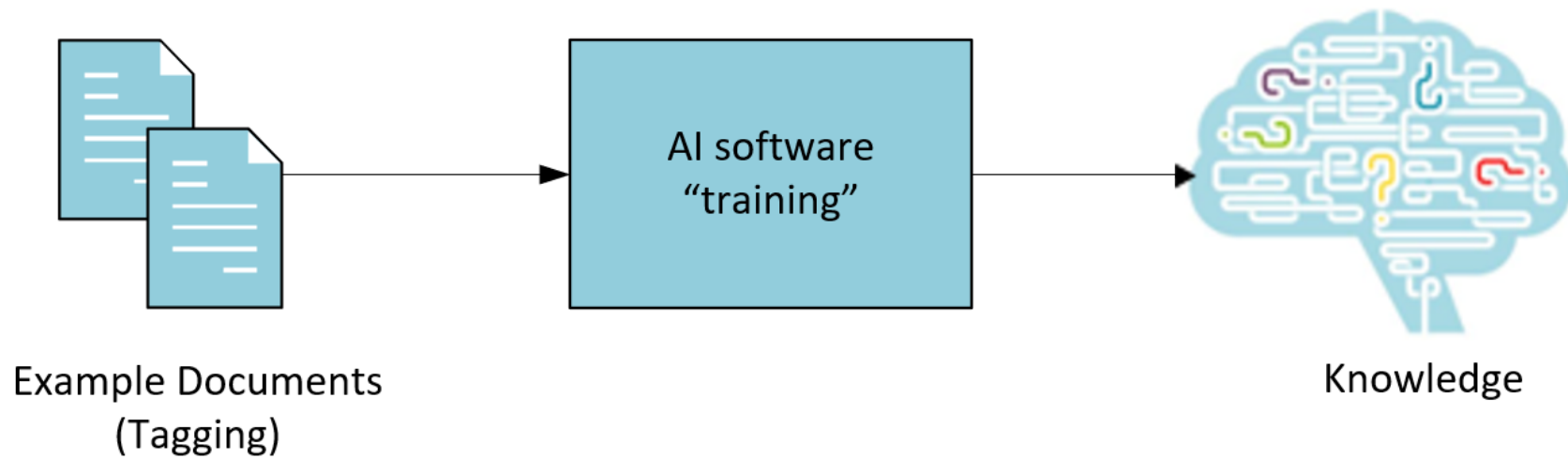
```
([#:\. ]([0-9]{3}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{4})[,\. ])|  
^([0-9]{3}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{4})[,\. ])|  
([#\.\. ]([0-9]{3}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{4})^)|  
^([0-9]{3}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{4})^)|  
([#\.\. ]([0-9][0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9]{4})[,\. ])|  
^([0-9][0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9]{4})[,\. ])|  
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([#\.\. ]([0-9][0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9]{4})[,\. ])|  
^([0-9][0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9]{4})[,\. ])|  
([#\.\. ]([0-9][0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9]{4})^)|  
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([#\.\. ]([0-9][0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9]{4})[,\. ])|  
^([0-9][0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9ABbCDGHlIJKkLOQRSUZx&]{2}[ ]?[=\\*-][ ]?[0-9]{4})[,\. ])|  
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([Xx]{2,3}[ ]?[Xx]{2}[ ]?[0-9]{4})|  
([#\.\. ]([0-9]{3}[ ]?[0-9]{2}[ ]?[KkXx*]{4})[,\. ])|  
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([#\.\. ]([0-9]{3}[ ]?[0-9]{2}[ ]?[KkXx*]{4})^)|  
^([0-9]{3}[ ]?[0-9]{2}[ ]?[KkXx*]{4})^)|  
<K claim 95>[ ]<K number 95>[ ]{1,2}([0-9]{3}[ ]?[0-9]{2}[ ]?[0-9]{4})[0-9]{3}[ ]?[0-9]{2}[ ]?[0-9]{4}
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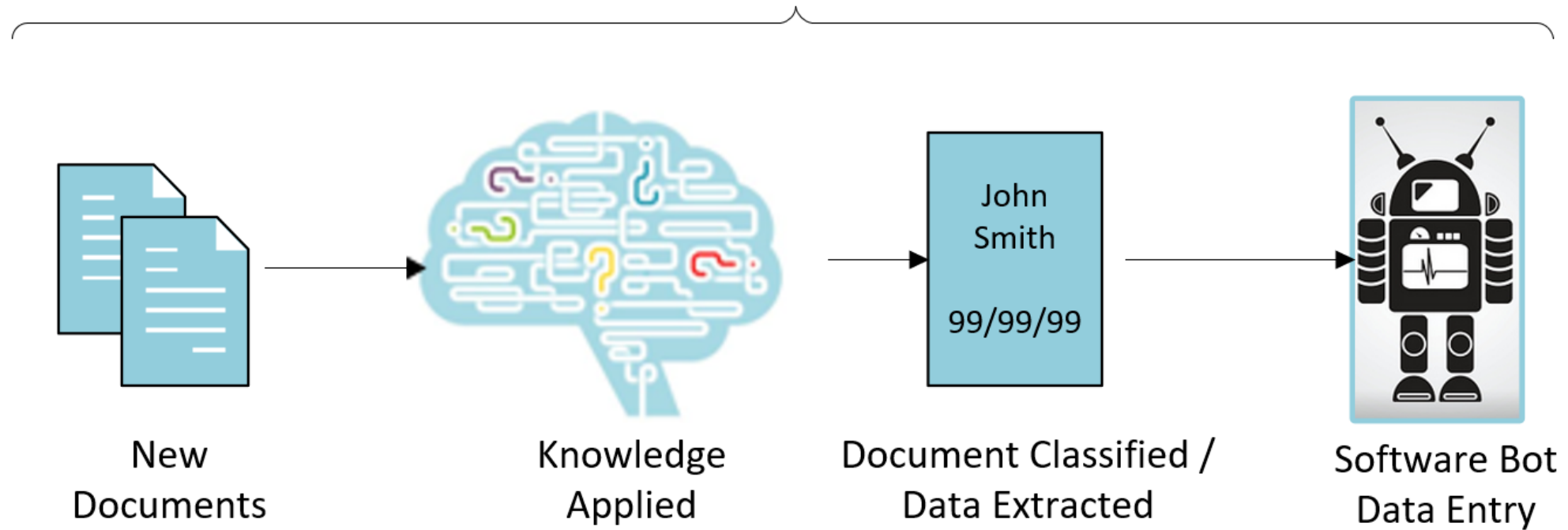

Machine learning overview

- Supervised vs. Online learning
- Black box AI vs. exposed knowledge
- Confidences – correct field (ML) vs. no character errors (OCR)
- Accuracy - field vs. document

Supervised Machine Learning (Initial System Setup)



Production Processing



Structured data - Zonal

Close

Save

First Document

Previous Document

Next Document

Last Document

Previous Conflict

Next Conflict

Filter

Analyze

Reset

Reload

Zone Mode

1 role column

Show Column

Structured Example

Role Schemas

Field Type

Document Type

Field List

Field Text	Field Type	Entity Type	Role 1
123-456	Case Number [F3]	Case Number	Case Number
08/10/2017	EventDate [F3]	Date	Event Date
123-456	EventTime [F2]	Time	Event Time

Document (1 / 1) - Test accident report.pdf

Page 1 / 4

DR 2447 (02/01/06)
COLORADO DEPARTMENT OF REVENUE

MAIL TO: STATE OF COLORADO
MOTOR VEHICLE
TRAFFIC RECORDS
DENVER, CO 80261-0016

STATE OF COLORADO TRAFFIC ACCIDENT REPORT

☐ AMENDED/SUPPL. ☐ UNDER \$1,000 ☐ COUNTER REPORT ☐ PRIVATE PROPERTY

PAGE 1 OF 4 PAGES

CDOT Code

☐ INTERSTATE HWY
☐ STATE HWY
☒ CITY ST/CNTY RD

HWY NUMBER
MILEPOINT

DOR Code

A01

Case #
123-456

Date of Accident
08/10/2017

City
Fountain

Agency
Fountain Police Department

County
El Paso

County #
4

Officer Name
D.S. Gilbertsen

Signature

Detail
P T L

B07

Number Killed
0

Number Injured
0

Location Route, Street, Road
400 Block Of E. Ohio Avenue

Miles
Feet

N ☒ S ☐ E ☐ W ☐ OF:
At: Ring Street

Date of Report
08/10/2017

Latitude
Longitude

B07

Agency Code
17-12026

Investigated
@ Scene ☒

Total Vehicles
0 3

District Number
3

Public Property/
Employee ☐

Photos Taken
☒

Railroad Crossing
Related ☐

Const. Zone
Related ☐

Highway
Interchg. ☐

Bridge
Related ☐

B10

Traffic Unit #
1 or 1 ☒ Veh. ☐ Parked ☐ Bicycle ☐ Pedestrian ☐ Non-Vehicle ☐ Non-Contact Veh

Traffic Unit #
2 or 2 ☒ Veh. ☐ Parked ☐ Bicycle ☐ Pedestrian ☐ Non-Vehicle ☐ Non-Contact Veh

Last Name
Smith

First
Samantha

MI
W

Last Name
Peterpiper

First
Pamela

MI

Street Address

Personal Phone
()

City
Fountain

State
CO

ZIP
80817

Bus. Phone
()

Street Address

Personal Phone
()

City
Fountain

State
CO

ZIP
80817

Bus. Phone
()

Driver License Number
799

CDL
AL

Sex

DOB

Driver License Number

CDL
CA

Sex

DOB

C03

Primary Violation
☐ DUI Careless Driving

Violation Code
42-4-1402

Citation Number
103865

Common Code
141

Year
2 0 1 5

Make
Ford

Model
Explorer

Body Type
UP

Year
2 0 0 0

Make
Kia

Model
Sportage

Body Type
UP

License Plate Number

State or Country

Color

License Plate Number

State or Country

Color

Unstructured Data

Field Training - 0_02.gdoc*

Close Save

First Document Previous Document Next Document Last Document

Previous Conflict Next Conflict Filter

Analyze Reset Reload Zone Mode

1 role column Show Column

Unstructured Example Document Type

Field List ⓘ

Field Text	Field Type	Entity Type	Role 1
FEDERAL HOME LOAN MC	Plaintiff [F5]	Company	Plaintiff
BANK OF AMERICA,	Defendant [F4]	Company	Defendant
2015-CA-000094-O	Case Number [F1]	Case Number	Case Number
30th day of April, 2015 at	EventDate [F3]	Date	Event Date
9:45 AM Eastern	EventTime [F2]	Time	Event Time

Document (2 / 24) - 0_02.gdoc

Page 1 / 3

Filing # 26348196 E-Filed 04/21/2015 02:21:42 PM

IN THE CIRCUIT COURT OF THE NINTH JUDICIAL CIRCUIT OF THE STATE OF
FLORIDA, IN AND FOR ORANGE COUNTY
CIVIL DIVISION

FEDERAL HOME LOAN MORTGAGE
CORPORATION
Plaintiff,
vs.
BANK OF AMERICA, et al.
Defendant(s),

Case No: 2015-CA-000094-O
Division:

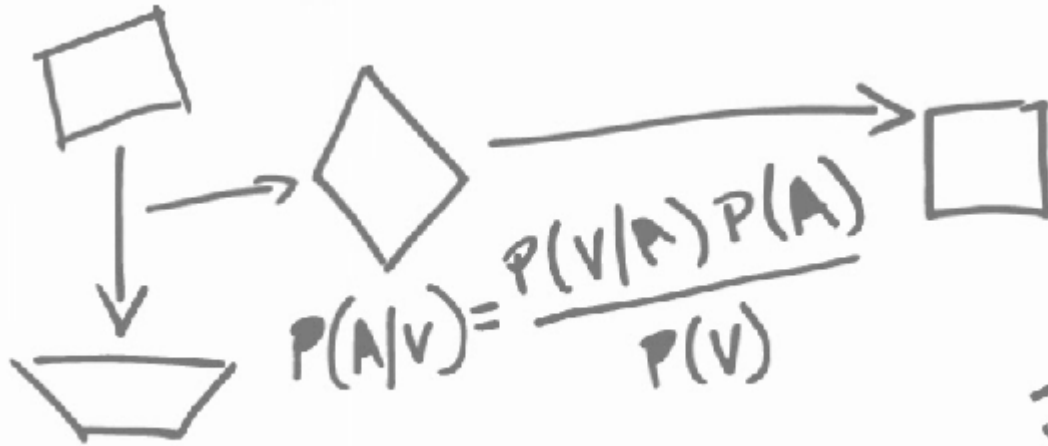
RE-NOTICE OF HEARING
(cancels hearing of 5/21/2015 @ 2:45 PM)

TO: All parties on the attached Master Civil Service List
THERE WILL BE A HEARING before the Honorable Keith White, Circuit Court Judge,
on the 30th day of April, 2015 at 9:45 AM Eastern Standard Time, or as soon thereafter as

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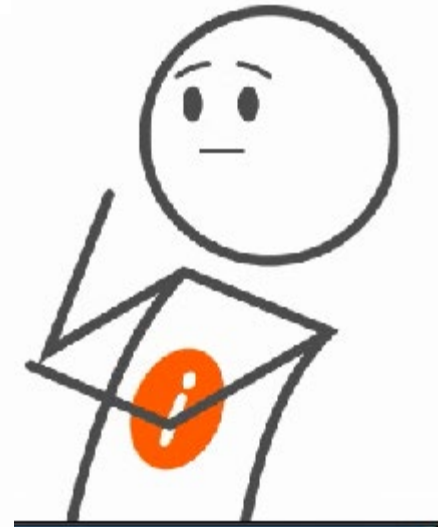
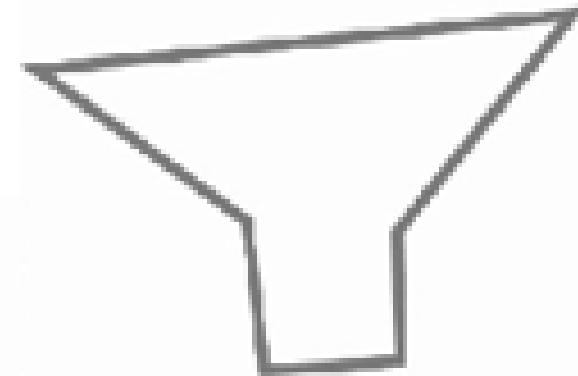
CSI

Content Locators, Role Determination, Conditional Random Fields (CRFs), Natural Language Processing (NLP), Parts of Speech, etc...



$$J(\bullet) = \frac{1}{2M} \sum_{i=1}^m \left(\gamma_{\bullet}(x^{(i)}) \right)$$

$$\bullet = \frac{1}{1 + \exp[-(\mathcal{J}_{\bullet} + \sum_{\mathcal{F}} \mathcal{R})]}$$



Visible features

- Document analysis
- Establish context
- Relative positioning
- What's around it that matters

IN THE CIRCUIT COURT OF THE NINTH
JUDICIAL CIRCUIT, IN AND FOR ORANGE
COUNTY, FLORIDA

CASE NO.: 2014-CA-001234-C

DBK MANAGEMENT, LLC, a Florida limited
liability company,

Plaintiff

vs.

HRKALOVIC HOMES, LLC, a Florida limited
liability company,

Defendant

NOTICE OF HEARING

PLEASE TAKE NOTICE that on the 15th day of July, 2014, at 2:00 p.m., or as soon thereafter
as counsel can be heard, the undersigned counsel for Defendant, HRKALOVIC HOMES, LLC, a Florida
limited liability company, will call up for hearing before the Honorable Donald E. Grincewicz, in
Courtroom 18B, of the Orange County Courthouse, 425 North Orange Avenue, Florida 32801, the
following matter:

MOTION TO DISMISS COUNTS II AND IV OF PLAINTIFF'S COMPLAINT
OR FOR A MORE DEFINITE STATEMENT AS TO COUNT II

PLEASE GOVERN YOURSELVES ACCORDINGLY

Respectfully submitted this ¹⁴⁶ day of
May, 2014, by:

FRIEDMAN, FRIEDMAN & LONG, P.A.
766 N. Sun Drive, Suite 4030
Lake Mary, FL 32746
PHONE: (407) 830-6331
Primary E-Mail: mfriedman@ffllegal.com
Secondary E-Mail: drudolf@friedmanfriedmanandlong.com
jhamel@friedmanfriedmanandlong.com



MARTIN S. FRIEDMAN
Florida Bar No.: 0199060
For the Firm

Non visible features

- Parts of speech tagging
- Natural language processing
- Meaning of words not just their presence

Filing<VVG> #<UNC> 13325244<UNC> Electronically<AVO> Filed<VVD> 05/06/2014<CRD>
01<CRD>:<PUN>46<CRD>:<PUN>28<CRD> PM<AVO>

IN<PRP> THE<ATo> CIRCUIT<NN1> COURT<NN1> OF<PRF> THE<ATo> NINTH<ORD>
JUDICIAL<AJ0> CIRCUIT<NN1>,<PUN> IN<PRP> AND<CJC> FOR<PRP> ORANGE<AJ0>
COUNTY<NN1>,<PUN> FLORIDA<NP0>

CASE<NN1> NO<ITJ>.<PUN>:<PUN> 2014-CA-001234-0<PUQ>

DBK<VDB> MANAGEMENT<NN1>,<PUN> LLC<VHG>,<PUN> a<ATo> Florida<NP0> limited<AJ0>
liability<NN1> company<NN1>,<PUN>

Plaintiff<NP0>,<PUN>

v<CRD>.<PUN>

HRKALOVIC<AJ0> HOMES<NN2>,<PUN> LLC<ITJ>,<PUN> a<ATo> Florida<NP0> limited<AJ0>
liability<NN1> company<NN1>,<PUN>

Defendant<NN1>.<PUN>

NOTICE<NN1> OF<PRF> HEARING<VVG> PLEASE<AVO> TAKE<VVB> NOTICE<NN1> that<CJT> on<PRP>
the<ATo> 15<CRD>th<NN0> day<NN1> of<PRF> July<NP0>,<PUN> 2014<CRD>,<PUN> at<PRP>
2<NN0>:<PUN>00<CRD> p<ZZ0>.<PUN>m<ZZ0>,<PUN>,<PUN> or<CJC> as<CJS> soon<AVO> thereafter<AVO>
as<CJS> counsel<NN1> can<VM0> be<VBI> heard<VVN>,<PUN> the<ATo> undersigned<AJ0> counsel<NN1>
for<PRP> Defendant<NN1>,<PUN> HRKALOVIC<AJ0> HOMES<NN2>,<PUN> LLC<ITJ>,<PUN> a<ATo>
Florida<NP0> limited<AJ0> liability<NN1> company<NN1>,<PUN> will<VM0> call<VVI> up<AVP> for<PRP>
hearing<VVG> before<PRP> the<ATo> Honorable<AJ0> Donald<NP0> E<ZZ0>.<PUN> Grincewicz<NP0>,<PUN>
in<PRP> Courtroom<NN1> 18B<CRD>,<PUN> of<PRF> the<ATo> Orange<NN1> County<NN1>
Courthouse<NN1>,<PUN> 425<NN0> North<NN1> Orange<AJ0> Avenue<NN1>,<PUN> Florida<NP0>
32801<UNC>,<PUN> the<ATo> following<AJ0> matter<NN1>:<PUN>

MOTION<NN1> TO<TO0> DISMISS<VVI> COUNTS<PNX> II<CRD> AND<CJC> IV<CRD> OF<PRF>
PLAINTIFFS<NN2> COMPLAINT<NN1> OR<CJC> FOR<PRP> A<ATo> MORE<AVO> DEFINITE<AJ0>
STATEMENT<NN1> AS<CJS> TO<PRP> COUNT<VVI> II<CRD>

PLEASE<AVO> GOVERN<VVB> YOURSELVES<PNX> ACCORDINGLY<AVO>.<PUN>

i<PNP>4t<ORD>-<PNI> Respectfully<AVO> submitted<VVN> this<DT0> __<NN1>£<NN0>_<VHG>day<NN1>

First, Knowledge to Locate Content

CourtsDemoRoom.projdb - Intellidact Information Extraction Designer

Project Test Documents Process Online Learning View Help

Project Hierarchy Training Set (Unstr) Document (1 / 24) - 0_01.gdoc

File Name

- 0_01.gdoc
- 0_02.gdoc
- 0_03.gdoc
- 0_04.gdoc
- 0_05.gdoc
- 0_06.gdoc
- 0_07.gdoc
- 0_08.gdoc
- 0_09.gdoc
- 0_10.gdoc
- 0_11.gdoc
- 0_12.gdoc
- 0_13.gdoc
- 0_14.gdoc
- 0_15.gdoc
- 0_16.gdoc
- 0_17.gdoc
- 0_18.gdoc

Content Locators

- DateFormat
- TimeFormat
- RoomFormat
- CaseNumberFormat
- NameDict
- CompanyDict

Structured Example

- Field Types
- Entity Types
- Role Schemas
- Content Locators

Page 1 / 1

Filing # 37333504 E-Filed 02/02/2016 07:32:45 PM

IN THE CIRCUIT COURT OF THE
9th JUDICIAL CIRCUIT, IN AND
FOR ORANGE COUNTY, FLORIDA

SCOTT LEVINE,
Plaintiff,
v.
BSP HOLDINGS, LLC, *et al.*,
Defendants.

NOTICE OF HEARING

NOTICE IS HEREBY GIVEN that on February 3, 2016, at 8:30AM or as soon thereafter as counsel can be heard, the undersigned will bring on to be heard Defendants **MOTION TO WITHDRAW**, before the Honorable Margaret Schreiber at

Results Settings

Content Locator - DateFormat

☐ Use content locator from parent

Selected method type

Format Locator

General locator settings

Settings

Predefined regular expressions

<please select a template>

Regular expression

```
(19|20)\d\d[- /.](0|1-9)[12][012](- /.)(0|1-9)[12][0-9][3011]
(0|1-9)[12][012](- /.)(0|1-9)[12][0-9][3011](- /.)(19|20)\d\d
(0|1-9)[12][0-9][3011](- /.)(0|1-9)[12][012](- /.)(19|20)\d\d
(January|JANUARY|February|FEBRUARY|March|MARCH|A
(January|JANUARY|February|FEBRUARY|March|MARCH|A
[1-3]?[0-9]?[ ]?([s][t][n][d][r][t][h])[ ]?[d][a][y][ ]?[o][f][ ]
[A-Z][a-z]{7,8} \d, \d(4),
\d(2)[a-z]{5} [a-z]{2} [A-Z][a-z]{7}, \d(4),
```


Next, Knowledge to Determine Role

Extraction Pattern Configuration Dialog - EventDate

Trained Patterns

Phrase	Role	Context	Forward Search	Backward Search	Pattern Type	Conflict Level	Training Frequency	Usage Frequency	Created	Last Used
date	Event Date	Label	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	4	3	6/6/2019 6:17:41	6/6/2019 6:17:5
on the	Event Date	Prefix phrase, directly left of field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	4	4	6/6/2019 6:17:41	6/6/2019 6:17:5
hearing on	Event Date	Prefix phrase, directly left of field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	3	3	6/6/2019 6:17:41	6/6/2019 6:17:5
hearing	Event Date	Adjacent and above field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	4	1	6/6/2019 6:17:41	6/6/2019 6:17:5
notice of hearing	Event Date	Adjacent and above field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	4	1	6/6/2019 6:17:41	6/6/2019 6:17:5
amended notice of h	Event Date	North from field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	3	5	6/6/2019 6:17:41	6/6/2019 6:17:5
boca raton fl 33487	Event Date	South from field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	3	6	6/6/2019 6:17:41	6/6/2019 6:17:5
certificate of service	Event Date	South from field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	10	11	6/6/2019 6:17:41	6/6/2019 6:17:5
date	Event Date	West from field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	4	6	6/6/2019 6:17:41	6/6/2019 6:17:5
defendant	Event Date	North from field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	5	5	6/6/2019 6:17:41	6/6/2019 6:17:5
defendant s	Event Date	North from field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	6	8	6/6/2019 6:17:41	6/6/2019 6:17:5
defendants	Event Date	North from field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	9	10	6/6/2019 6:17:41	6/6/2019 6:17:5
for final default	Event Date	South from field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	4	4	6/6/2019 6:17:41	6/6/2019 6:17:5
has been set as follo	Event Date	North from field	<input type="checkbox"/>	<input checked="" type="checkbox"/>	trained	0 %	3	0	6/6/2019 6:17:41	6/6/2019 6:17:4

Items displayed: 21

Close

Finally, How Sure We Are

Project

Test Documents

Process

Online Learning

View

Help

Project Hierarchy

Document (3 / 321) - 11188070_Mortgage.tif

Field Types

Entity Types

Role Schemas

Content Locators

Mortgage-Deed

Field Types

BorrowerAddress

LenderAddress

MortgageDate

Borrower

Beneficiary

LoanAmount

Pin

Trustee

LegalInfo

RecordInfo

County

InstrumentNo

RecordDate

Book

Page

PropertyAddress

Street1

Street2

ZIP

City

State

PropertyAddressGroup

Page 1 / 10

INSTR # 105502594
OR BK 40846 Pages 1143 - 1152
RECORDED 11/07/05 09:03:37
BROWARD COUNTY COMMISSION
DOC STMP-M: \$367.50
INT TAX: f1 \$210.00
DEPUTY CLERK 3250
#1, 10 Pages

Recording requested by and
when recorded return to:
2150 Cabot Blvd. West

Langhorne, PA 19047
Attn: Group 9, Inc.

This Mortgage was prepared by:
Jaber Esmail
Washington Mutual Bank, FA
15651 SHERIDAN ST, STE 1200
DAVIE, FL 33331

Washington Mutual

WaMu Equity Plus™
MORTGAGE

Loan number: 0693214025

THIS MORTGAGE is from
BRET M ESSLINGER AND STACIE L ESSLINGER

whose address is:
1875 Briar Ridge Rd FORT LAUDERDALE, FL 33327
("Borrower"); in favor of:
Washington Mutual Bank, FA, a federal association, which is organized and existing under the
laws of the United States of America and whose address is 2273 N Green Valley Parkway, Suite
#14, Henderson, NV 89014 ("Lender") and its successors or assigns.

Results

Settings

Benefits

Results by Field Type - Mortgage-Deed

BorrowerAddress (0 items)

MortgageDate (0 items)

Borrower (2 items)

Field	Name	Confidence
	BRET M ESSLINGER	Grantor 100.00 %
	STACIE L ESSLINGER	Grantor 99.94 %

Beneficiary (1 item)

Field	Name	Confidence
	Washington Mutual Bank, FA	Grantee 99.92 %

LoanAmount (1 item)

Field	Amount	Confidence
	105,000.00	Consider. 99.70 %

Pin (1 item)

Field	PropertyID	Confidence
	5039 01 04 4380	ParcelID 100.00 %

Trustee (0 items)

LegalInfo (1 item)

Field	Confidence
	LOT 84, BLOCK 4, SECTION 3- 100.00 %

PropertyAddressGroup.Street1 (1 item)

Field	Confidence
	1075 Briar Ridge Rd 0.00 %

PropertyAddressGroup.City (1 item)

Field	Confidence
-------	------------

Accuracy – Field vs. Document

Project Test Documents Process Online Learning View Help								
Benchmark Results								
Field Name	Expected	Found	Correct	Missing	Additional	Recall %	Precision %	
MortgageDate	273	270	262	11	8	95.97	97.04	
Borrower	522	522	521	1	1	99.81	99.81	
Beneficiary	391	398	386	2	9	99.49	97.74	
LoanAmount	313	312	309	2	1	99.36	99.68	
Pin	256	259	249	5	8	98.05	96.91	
RecordInfo.Book	254	254	228	22	22	91.34	91.34	
RecordInfo.Page	254	257	229	24	27	90.55	89.49	
PropertyAddress.Street1	314	295	276	25	6	92.04	97.97	
PropertyAddress.ZIP	318	292	286	30	4	90.57	98.63	
PropertyAddress.City	301	295	287	8	2	97.34	99.32	
RecordInfo.RecordDate	255	260	237	16	21	93.73	91.92	
TOTAL (Fields)	3451	3414	3270	146	109	95.77	96.81	
TOTAL (Documents)	321	321	178	104	68	55.45	55.45	

Results Settings Ben

Benchmark Tools

Select document type

Mortgage-Deed

Ignored fields

BorrowerAddress,BorrowerAddress.Street1,Bor...

Accept same field value in different location

BorrowerAddress,BorrowerAddress.Street1,Bor...

☒ Ignore punctuations at the end

Test/train split

☒ No test / train split

☐ Split 50:50

☐ Split 80:20

☐ Split 90:10

Trainable item for test/train split

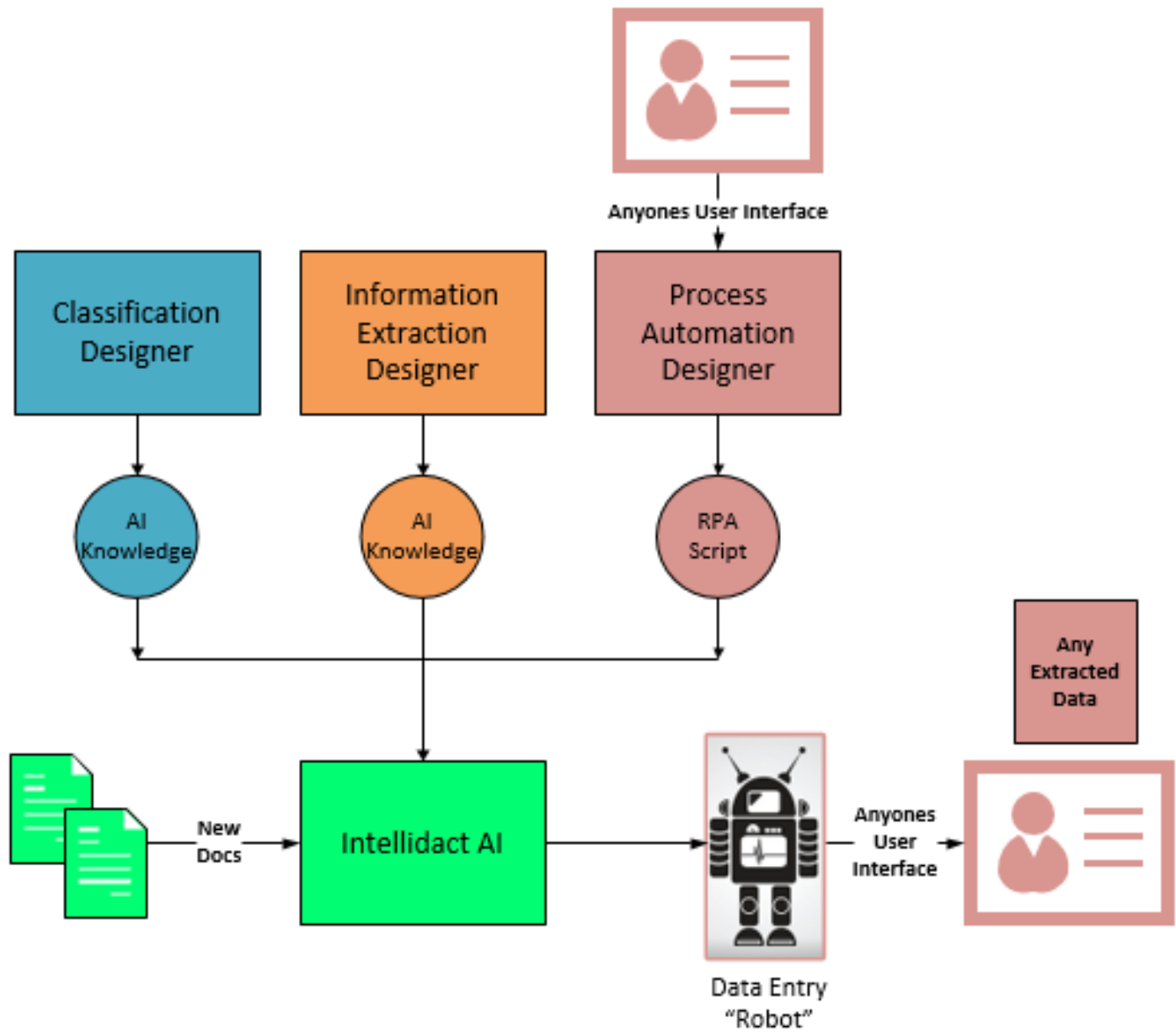
<Complete document type>

☐ Save as reference benchmark

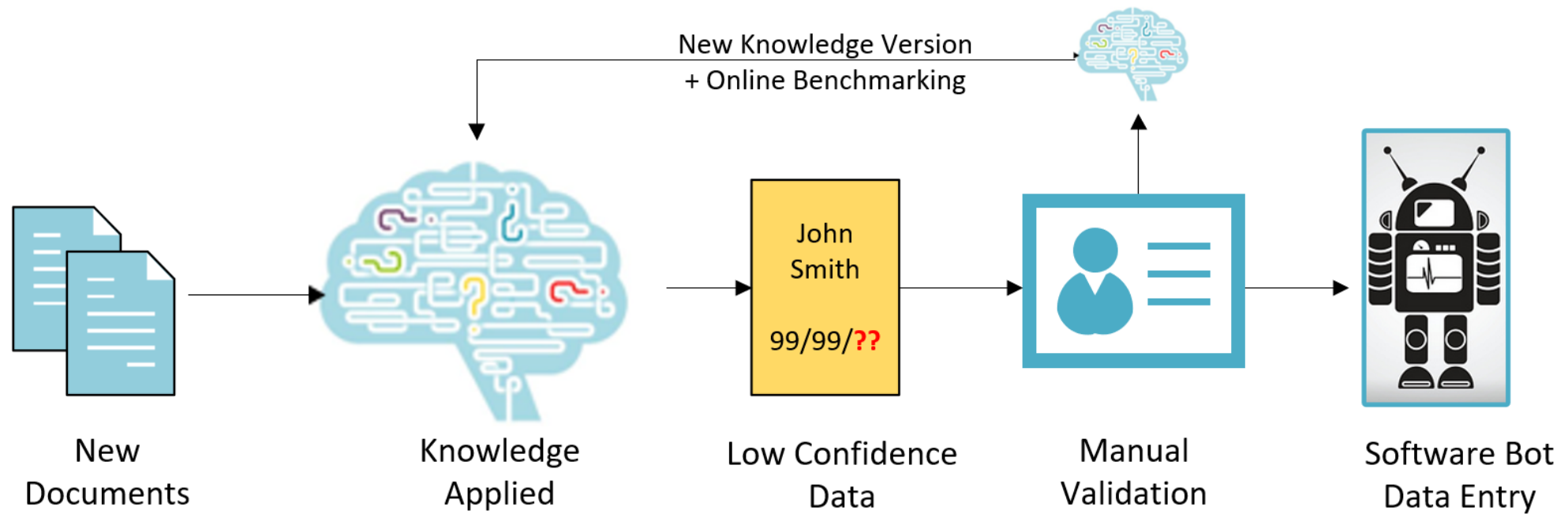
Recall = Correct / Expected (How complete are results)

Precision = Correct / Found (How many returned are correct)

Software bot integration



Online Machine Learning (Self improving system)





Show video 5

Online Learning

Never Forget

- If not PDF/A with text layer, **image quality and density does matter**
- AI training **is only** as good (or bad) as your training documents
- **Digitally born PDF/a's are preferred** - accuracy game changer 100% recognition

Questions?

Thank You!

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