

# L3 Demo 3 - Prebuilt Form Recognizer ID Model

November 21, 2022

## 1 Step 1 - Using Form Recognizer ID's API to extract information from Digital ID

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In [30]: ! activate ai-azure-c1
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import sys
```

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sys.path.append("/opt/conda/envs/ai-azure-c1/lib/python3.8/site-packages")
```

```
In [31]: from azure.core.credentials import AzureKeyCredential
from azure.ai.formrecognizer import FormRecognizerClient
```

```
In [32]: endpoint = "https://udacity-form-recognizer.cognitiveservices.azure.com/"
key = "62bb6572766845bc8cf5a5c386ae3542"
```

```
In [33]: form_recognizer_client = FormRecognizerClient(endpoint=endpoint, credential=AzureKeyCre
```

```
In [34]: content_url_list = [
    "https://raw.githubusercontent.com/natebuel29/cd0461-building-computer-vision-soluti
    "https://raw.githubusercontent.com/natebuel29/cd0461-building-computer-vision-solut
    "https://raw.githubusercontent.com/natebuel29/cd0461-building-computer-vision-solut
]
```

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In [35]: def print_id_card_details(identity_card):
    first_name = identity_card.fields.get("FirstName")
    if first_name:
        print("First Name: {} has confidence: {}".format(first_name.value, first_name.c
    last_name = identity_card.fields.get("LastName")
    if last_name:
        print("Last Name: {} has confidence: {}".format(last_name.value, last_name.conf
    document_number = identity_card.fields.get("DocumentNumber")
    if document_number:
        print("Document Number: {} has confidence: {}".format(document_number.value, do
    dob = identity_card.fields.get("DateOfBirth")
    if dob:
        print("Date of Birth: {} has confidence: {}".format(dob.value, dob.confidence))
    doe = identity_card.fields.get("DateOfExpiration")
```

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        if doe:
            print("Date of Expiration: {} has confidence: {}".format(doe.value, doe.confidence))
        sex = identity_card.fields.get("Sex")
        if sex:
            print("Sex: {} has confidence: {}".format(sex.value, sex.confidence))
        address = identity_card.fields.get("Address")
        if address:
            print("Address: {} has confidence: {}".format(address.value, address.confidence))
        country_region = identity_card.fields.get("CountryRegion")
        if country_region:
            print("Country/Region: {} has confidence: {}".format(country_region.value, country_region.confidence))
        region = identity_card.fields.get("Region")
        if region:
            print("Region: {} has confidence: {}".format(region.value, region.confidence))

In [36]: def extract_data_from_ids(form_recognizer_client,url_list):
        for url in url_list:
            id_content_from_url = form_recognizer_client.begin_recognize_identity_documents(url)
            collected_id_cards = id_content_from_url.result()
            print_id_card_details(collected_id_cards[0])

In [37]: extract_data_from_ids(form_recognizer_client,content_url_list)

First Name: AVKASH CHAUHAN has confidence: 0.76
Last Name: CHAUHAN has confidence: 0.883
Document Number: D1234578 has confidence: 0.995
Date of Birth: 1990-01-01 has confidence: 0.995
Date of Expiration: 2025-01-01 has confidence: 0.992
Sex: X has confidence: 0.161
Address: 1234 Circle Ave, Apt 123 San Mateo, CA, 94401 has confidence: 0.585
Country/Region: USA has confidence: 0.99
Region: California has confidence: 0.984
First Name: James has confidence: 0.822
Last Name: Jackson has confidence: 0.843
Document Number: D9753933 has confidence: 0.995
Date of Birth: 1956-10-12 has confidence: 0.995
Date of Expiration: 2027-02-20 has confidence: 0.993
Sex: M has confidence: 0.984
Country/Region: USA has confidence: 0.99
Region: California has confidence: 0.99
First Name: James has confidence: 0.408
Last Name: Webb has confidence: 0.69
Document Number: D4357789 has confidence: 0.995
Date of Birth: 1970-12-15 has confidence: 0.995
Date of Expiration: 2026-01-10 has confidence: 0.995
Sex: M has confidence: 0.993
Country/Region: USA has confidence: 0.99
Region: California has confidence: 0.99

```