

**WE LOVE FORGING POWERFUL TOOLS
WITH DATA**



Data + Science + Service = ImmAzing®

Competence and enthusiasm

DataScience Service is specialised in **automated real estate valuation for banks**. Market leader in Austria (incl. the Austrian National Bank).

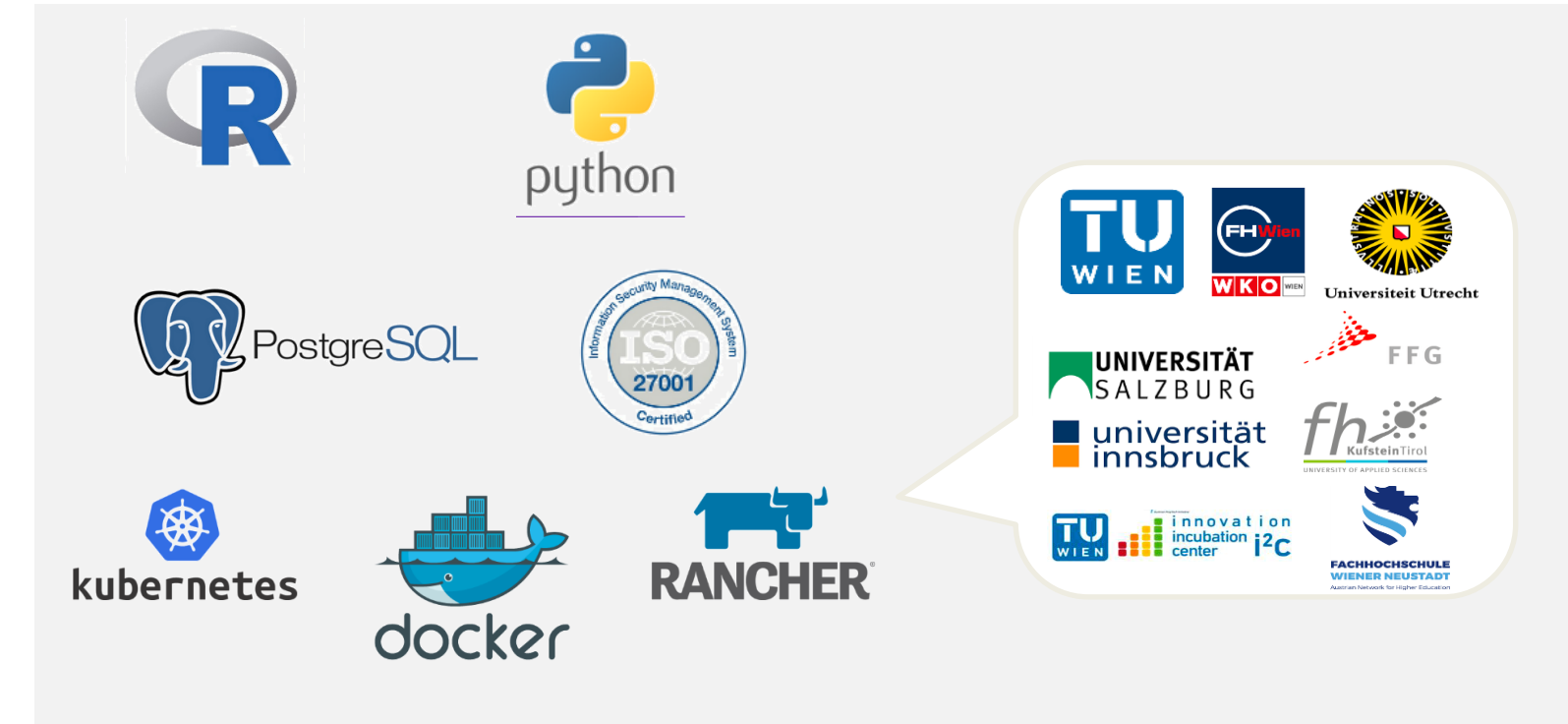
We cover the **entire range of services** from individual valuation and revaluation to portfolio analyzes and ESG.

ISO certified (ISO/IEC 27001, international standard to manage information security).

Winner of the startup-competition in the **HIGH TECH** category.



More than 50 employees
from 15 countries – 7 PhDs, 2 Profs

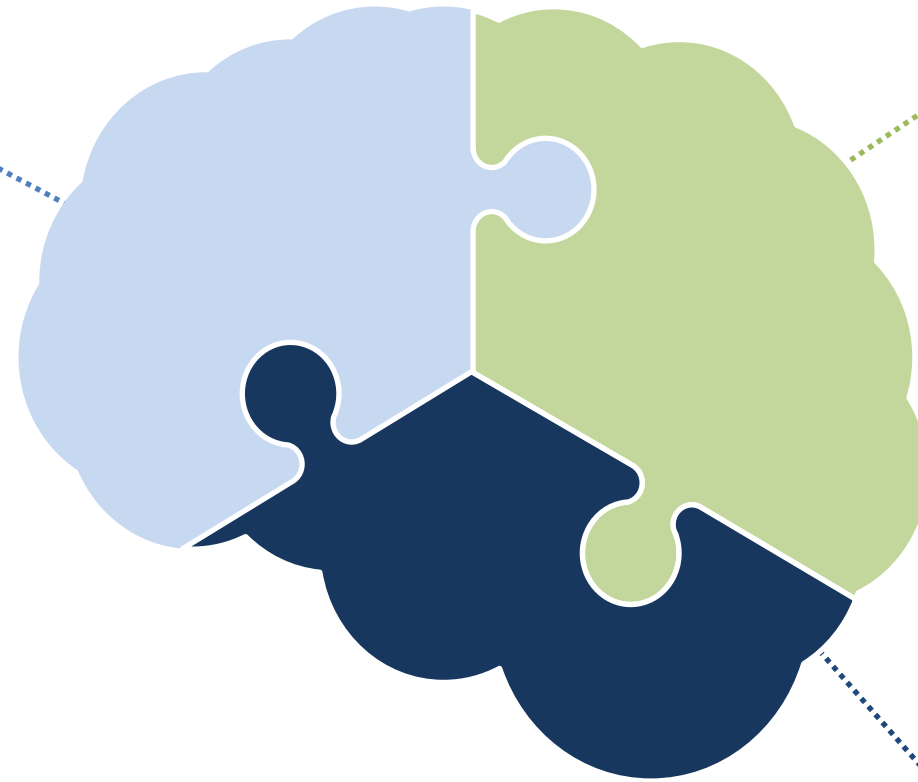




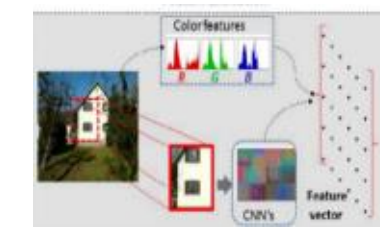
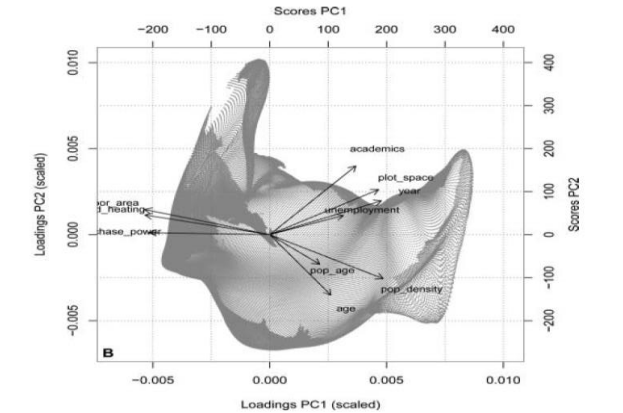
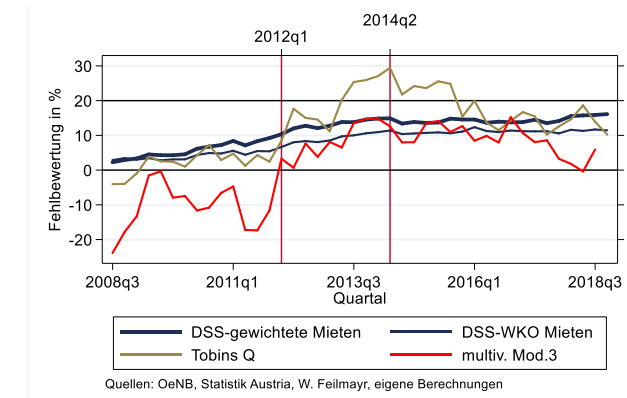
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Professional Automated Real Estate Valuation

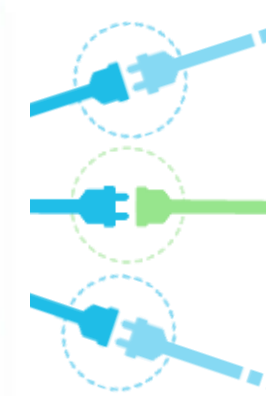
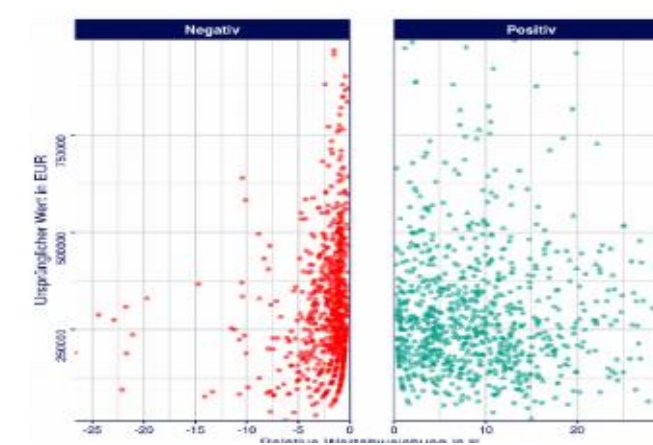
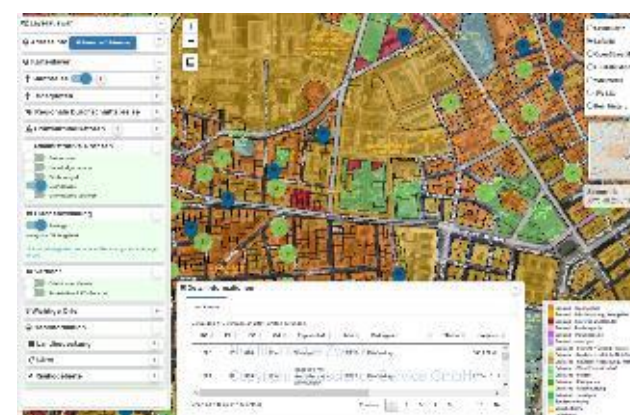
BEST DATA



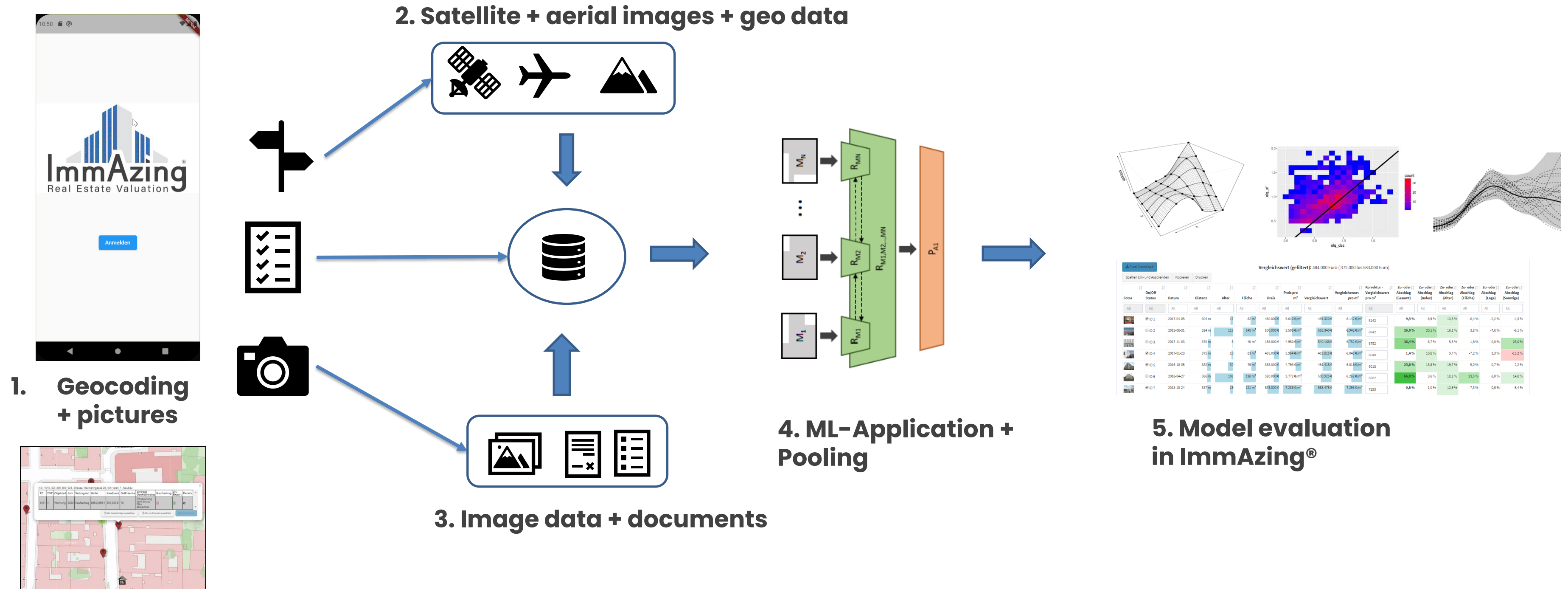
SCIENTIFIC METHODS



EXZELLENTE LIFE TIME SERVICE

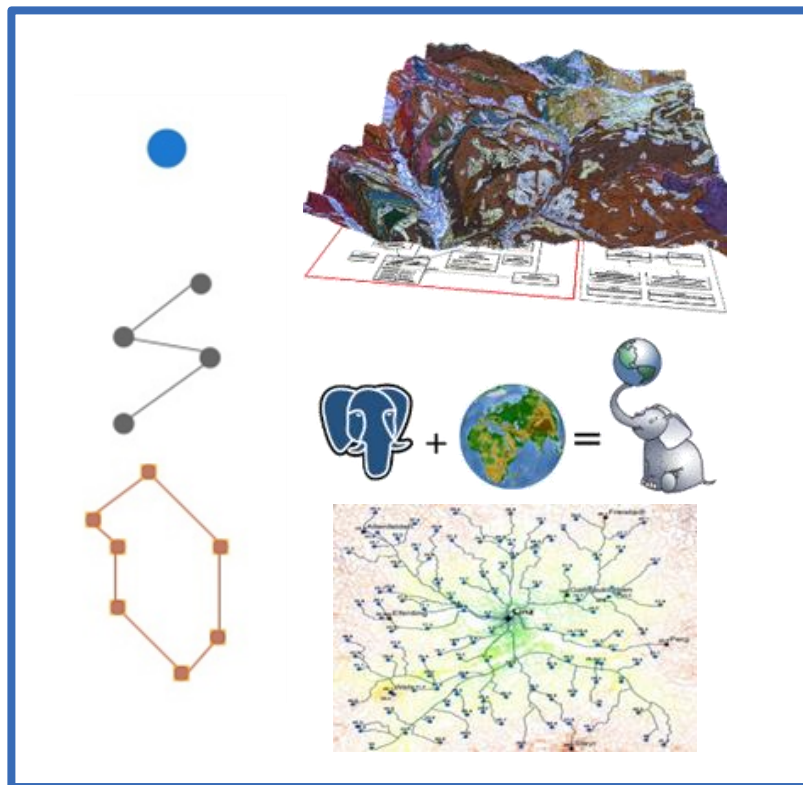


Vision: "One stop shop" for automated valuation

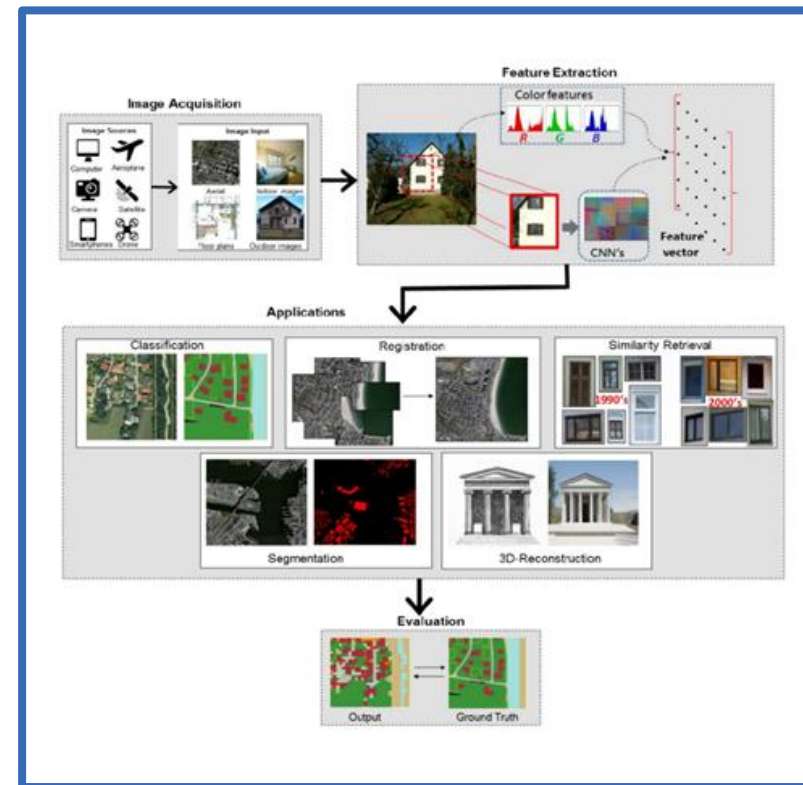


ImmAzing® AUTOCOMPLETE

Using ML for information extraction



**GEOSPATIAL AND
SATELLITE DATA**

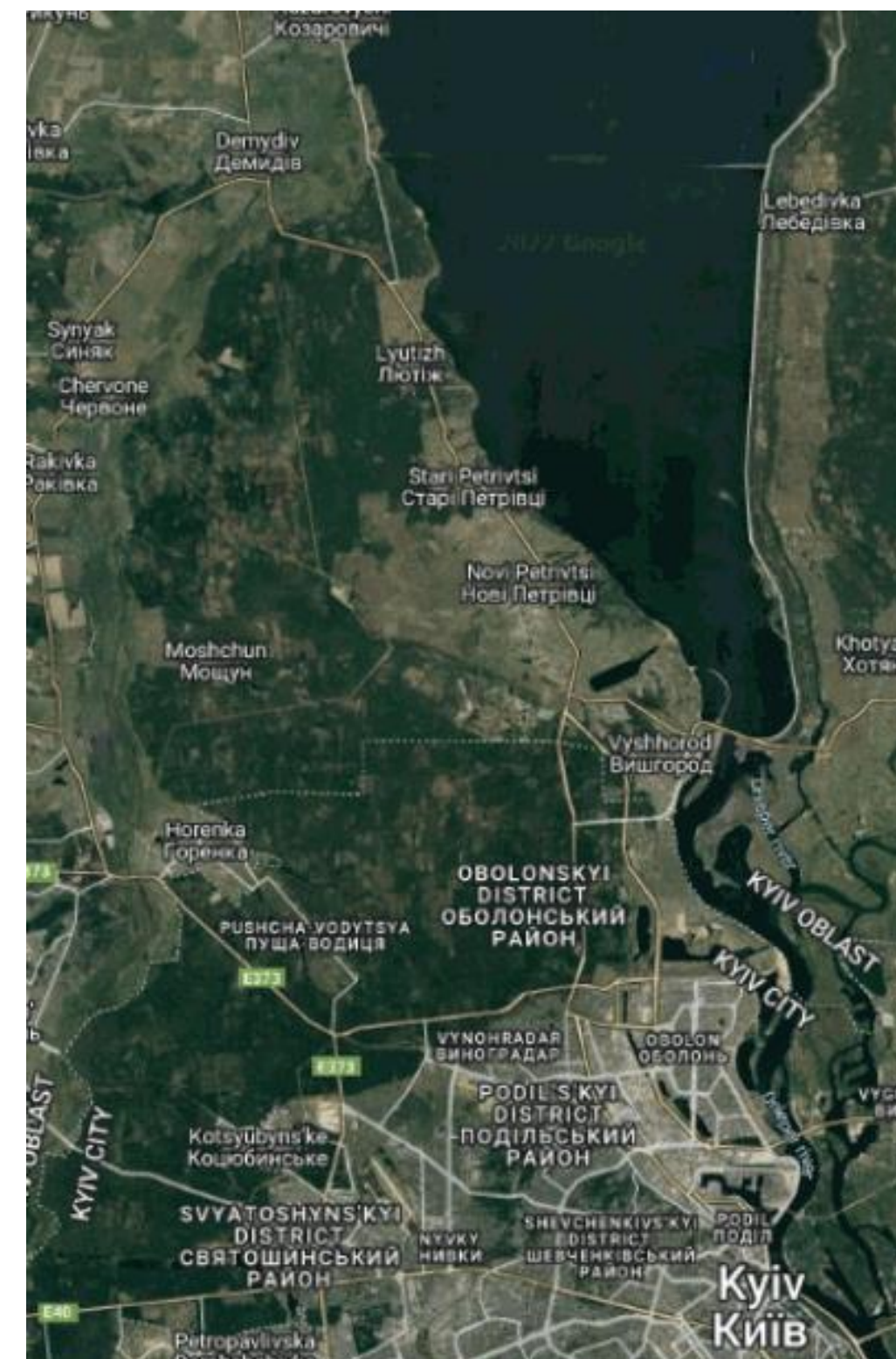


**DEEP
LEARNING**



**NATURAL LANGUAGE
PROCESSING**

Built-up Monitoring: Flood Risk Monitoring Marchfeld 2020 & Kiev 2022



Application of deep neural networks for image classification



Testingzone for new Prototypes

Altersklassifikation

Automatisiertes auslesen eines Energieausweises

Objektklassifikation

Geo Information 2.0

Automatisiertes auslesen eines Ehorapasses

Auto eHora

QuickEnergy

Build-up Checker

Floorplan segmentation

RoomTypeElo

QuickEnergy 2.0

HWB Predictor

Fileupload

Browse...

bad-braun-leer-600x400.jpg

Upload complete

Testingzone for new Prototypes

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Browse...

Kalkzementputz-mit-Rieselwurf-und-positiven-Faschen_haus_R_weixbau.jpg

Kalkzementputz-mit-Rieselwurf-und-positiven-Faschen_haus_R_weixbau.jpg

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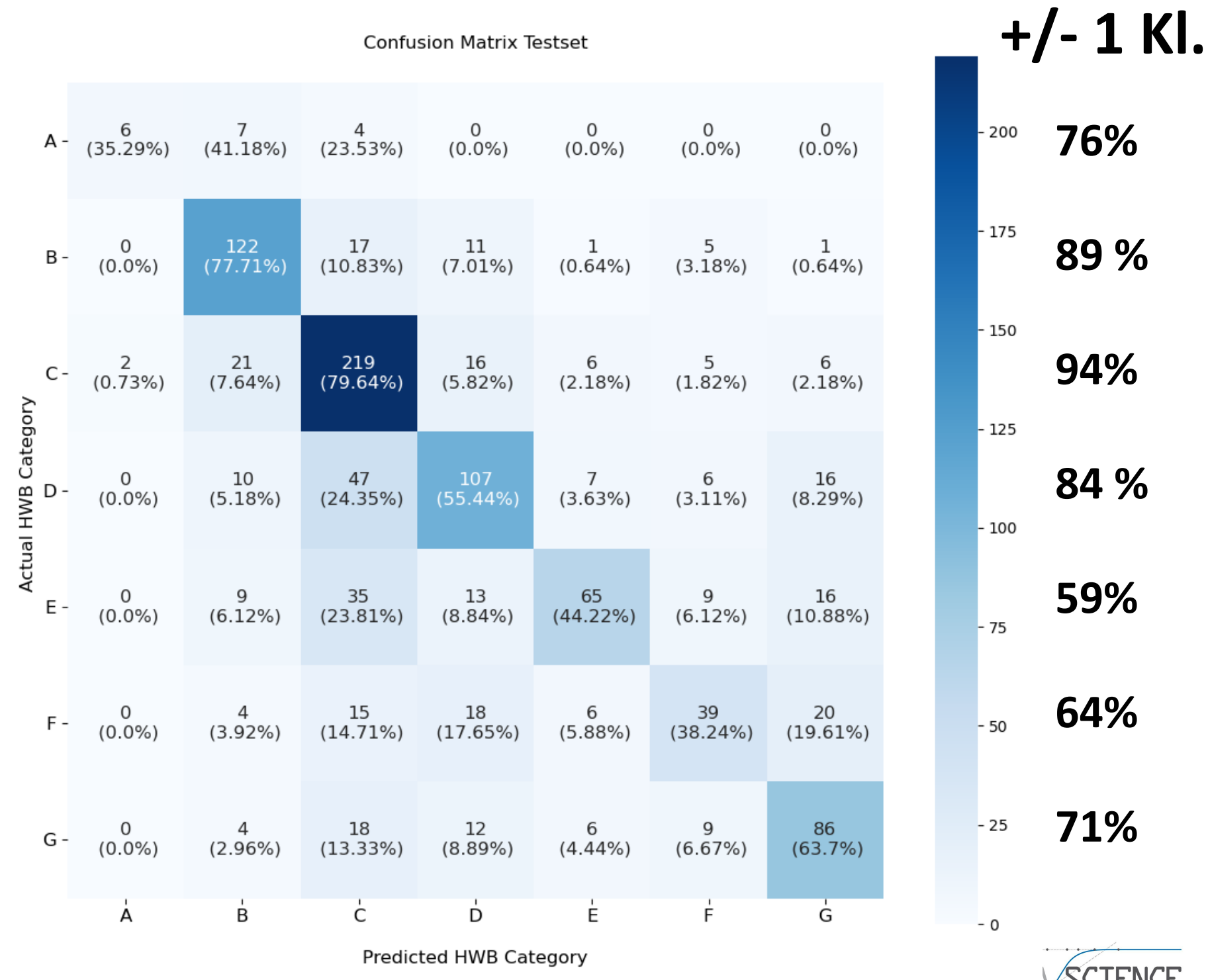
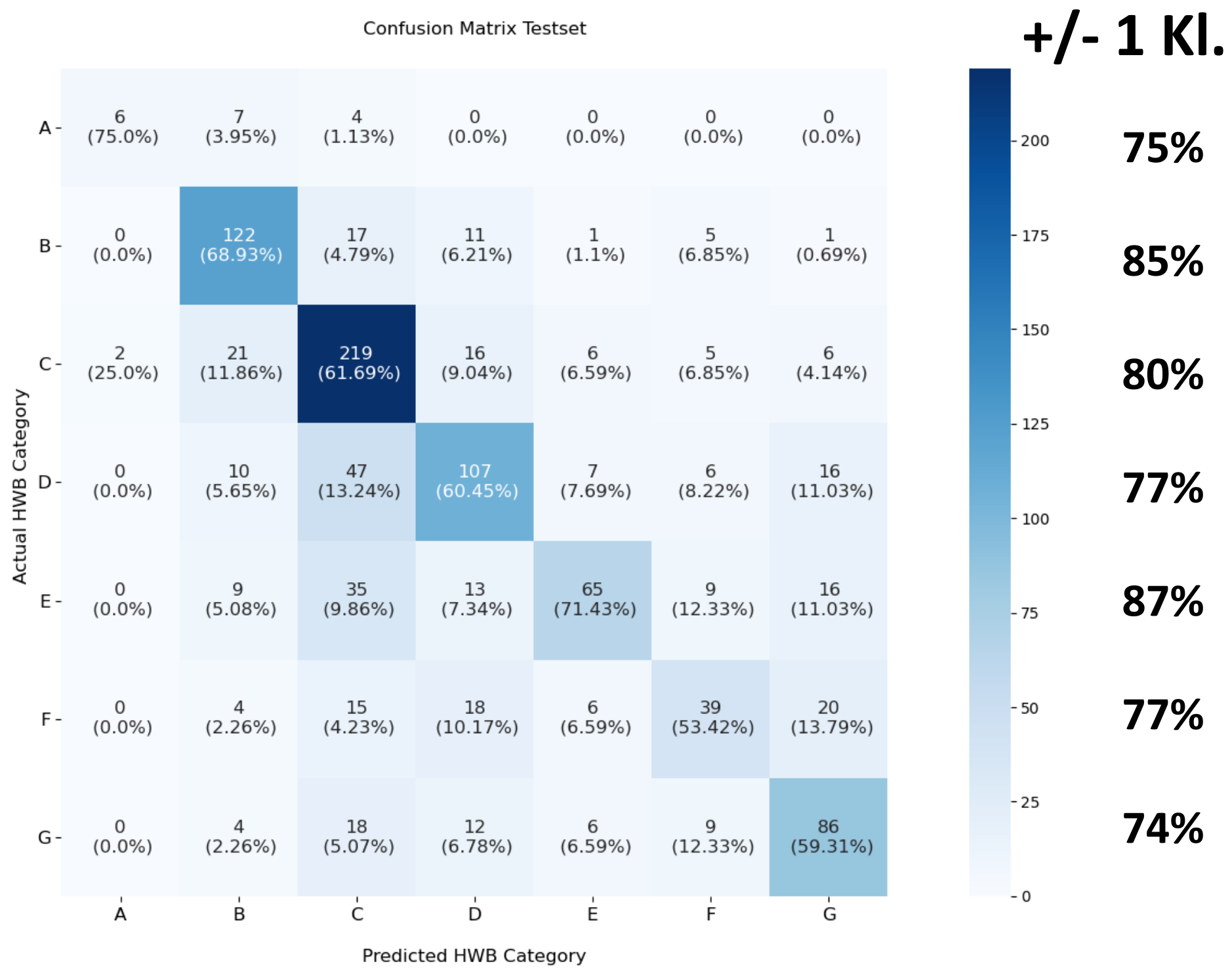
Fileupload

Browse...

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+ Kopieren

Example: predicting energy efficiency

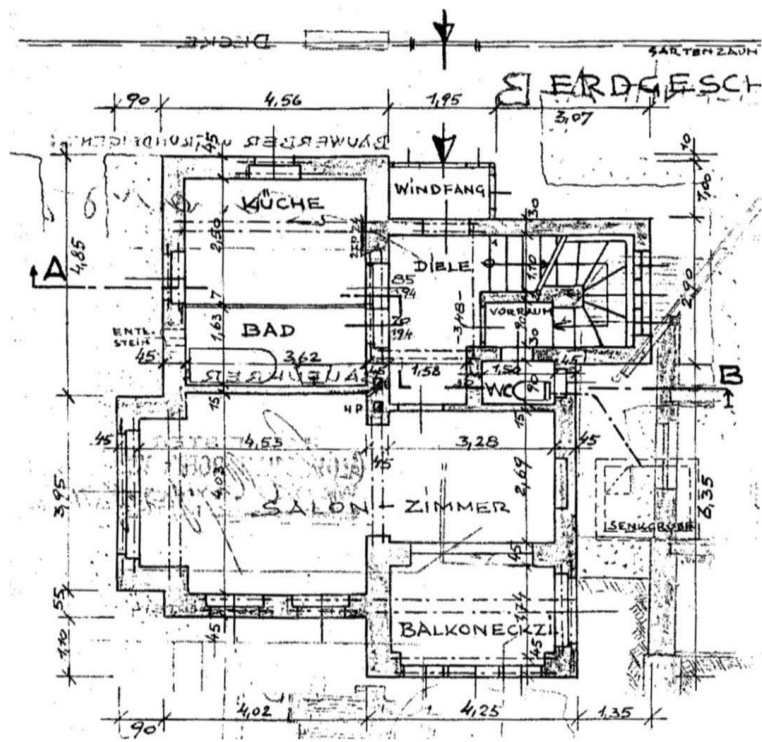


Predicted -> Actual

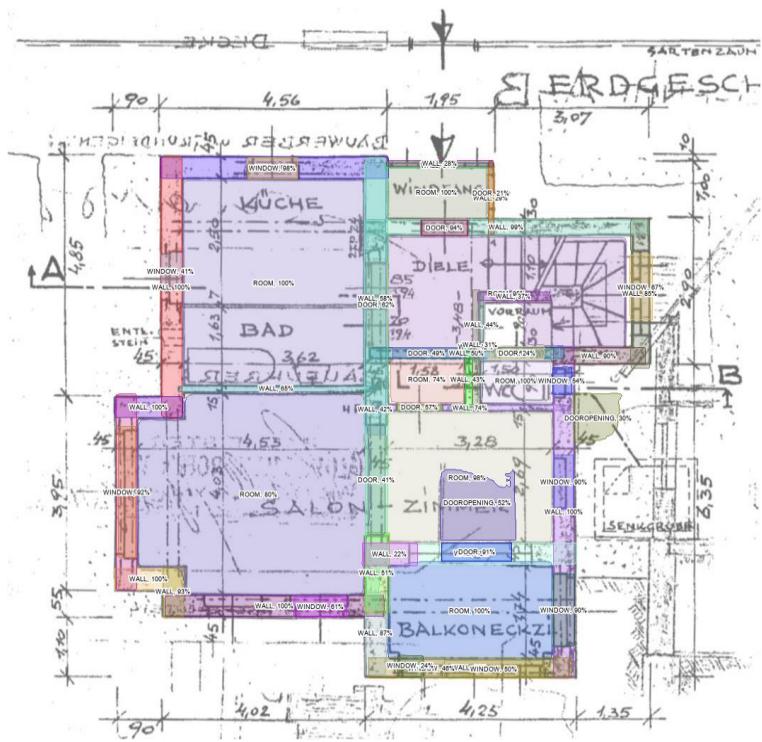
Actual -> Predicted

Floor plan recognition: Better than human?

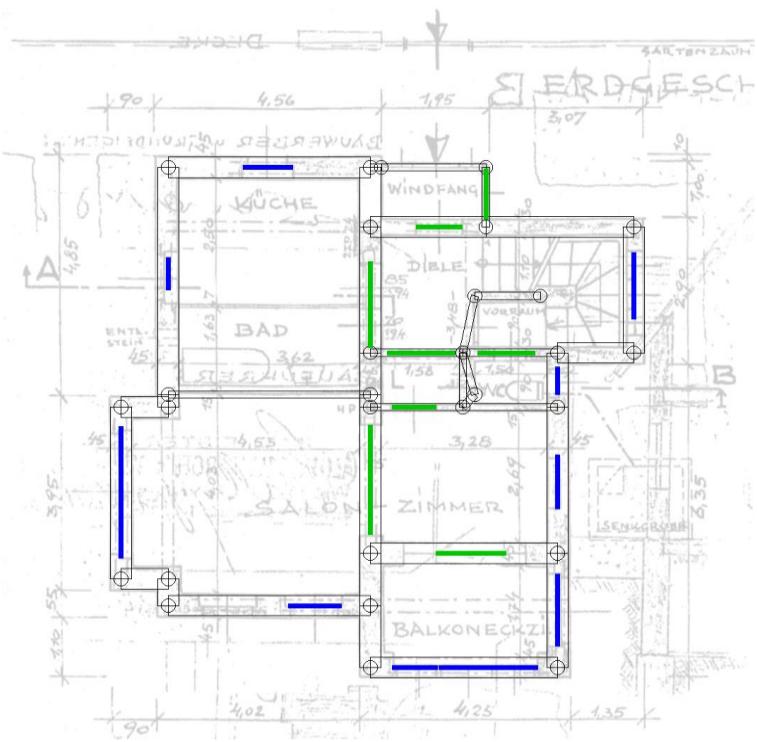
Input



ML recognition



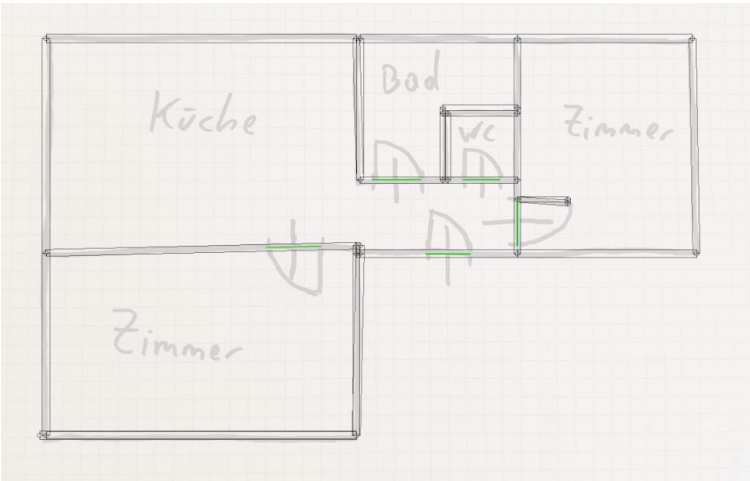
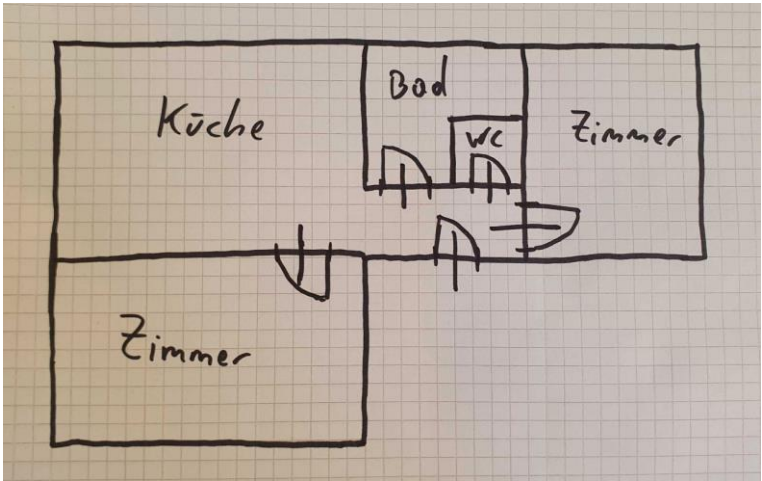
Internal data model



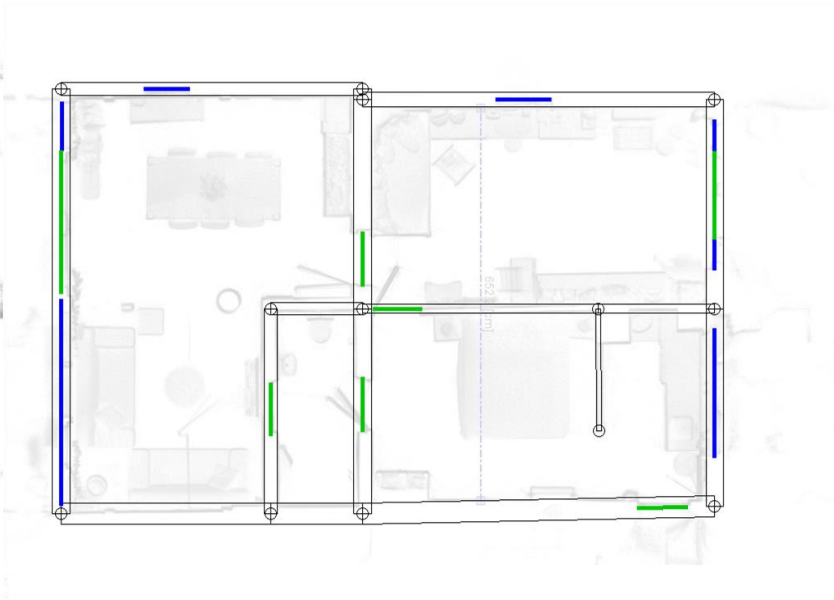
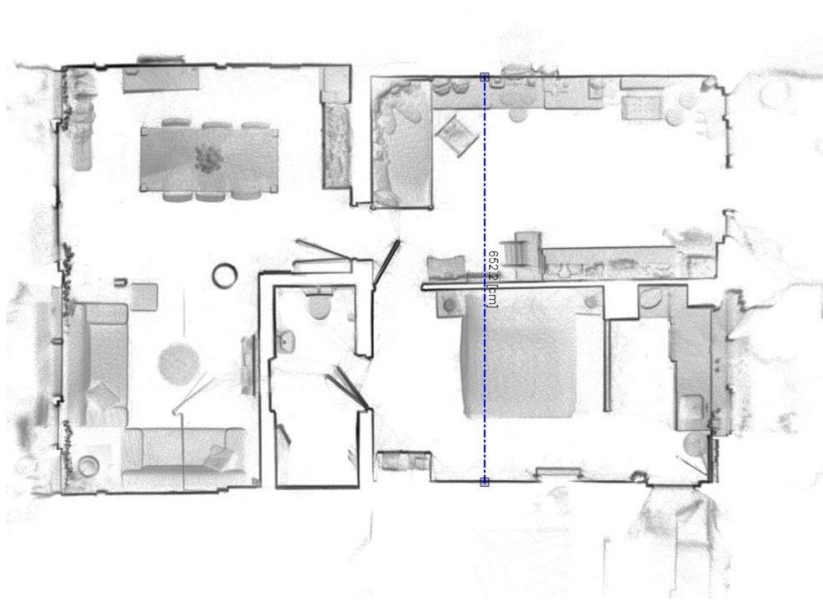
2D model



Hand sketches



Point clouds



Using OCR, Text Mining and LLM for document extraction (contracts, EPCs...)

- Exclusive access
- > 1.100 companies
- > 2,5 Mio objects
- Use of image and text information



- Direct access to the land register
- > 3 Mio Purchase contracts
- Automatic extraction with manual quality assurance



Integration of ESG in the sales comparables method

WikiRAPI online

60:00Philipp Straßer

1. ImmAzing® PRO

Letzte laden

Neue anleg

2. Adresse und Karte

AdresseKG, EZLiegenschaft

Land

AT

Straße Nummer

Mustergasse 1-3a

Postleitzahl C

4499 Muster

Vergleichsdaten:

Ein Objekt pro Adresse?

+

-

🏠

🔄

Map of Austria showing major cities like Linz, Salzburg, Wien, and Innsbruck.

Leaflet | (C) DataScience Service GmbH | Datenquellen: Basemap.at

Den Energieausweis hochladen ?

Hinweis: Derzeit werden als Dateiformat nur PDFs unterstützt.

Fileupload

Browse...No file selected

Fehler meldenSchließenDaten übernehmen

4. Berechnung

LadenExpert

Einstellungen:

Bilder & Dokumente?

Werte?

Berechnen

Bitte erfassen Sie eine Topnummer!

Baujahr und Zustand des Gebäudes:

2023

Baujahr als Zahl

Zustand Haus:Normal erhalten

Zustand Wohnung:Normal erhalten

Jahr der Renovierung:

Art der Renovierung:

Flächen:

Wohnfläche in m²:80

Anzahl Wohnräume:

Sonstige Flächen (Erfassung der m² ist optional):

Framework for machine learning applications “one stop shop”

AVM

- **immazing_mv_pf**: Market value predictions
- **immazing_fw**: Early warning signals
- **immazing_mp**: Market prediction models

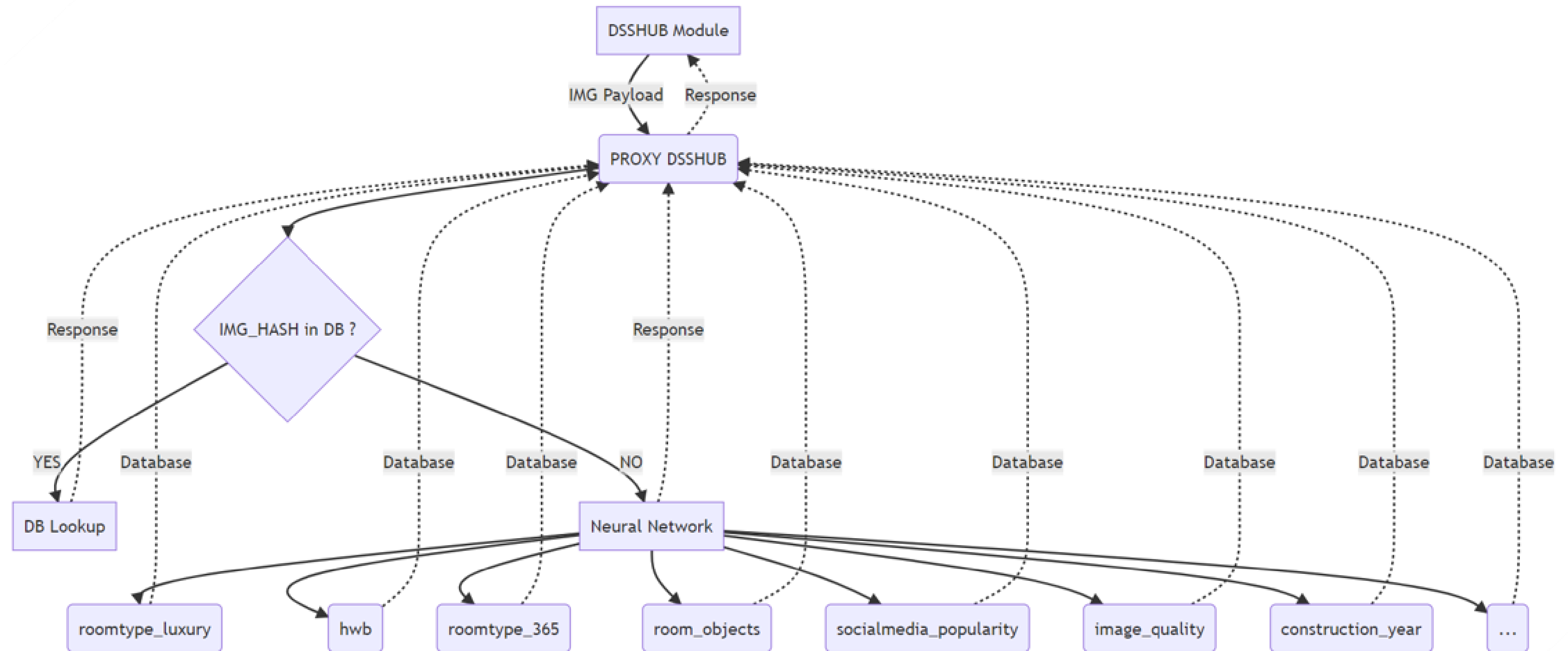
DEEP LEARNING

- **floor_plan**: Floor plan extraction
- **roomtype_luxury**: Room type prediction with ELO-Luxury Score
- **hwb**: HWB Class Prediction, should be used only on Facade Images
- **roomtype_365**: Roomtype Prediction based on Places365 dataset.
- **room_objects**: Semantic Segmentation of Objects in Room, Score describes the objects rel. size in the the Image. Semantic Segmentation trained on ADE20K.
- **socialmedia_popularity**: Social Media Popularity, trained on social media posts with images
- **image_quality**: Neural Network based prediction of Image Quality measuring MEAN and STD.
- **construction_year**: Neural Network based construction year prediction. Trained on diverse (facade, bathroom, kitchen, ...) real estate images.

NATURAL LANGUAGE PROESSING

- **OCR_TM**: Language Models for feature extraction from documents

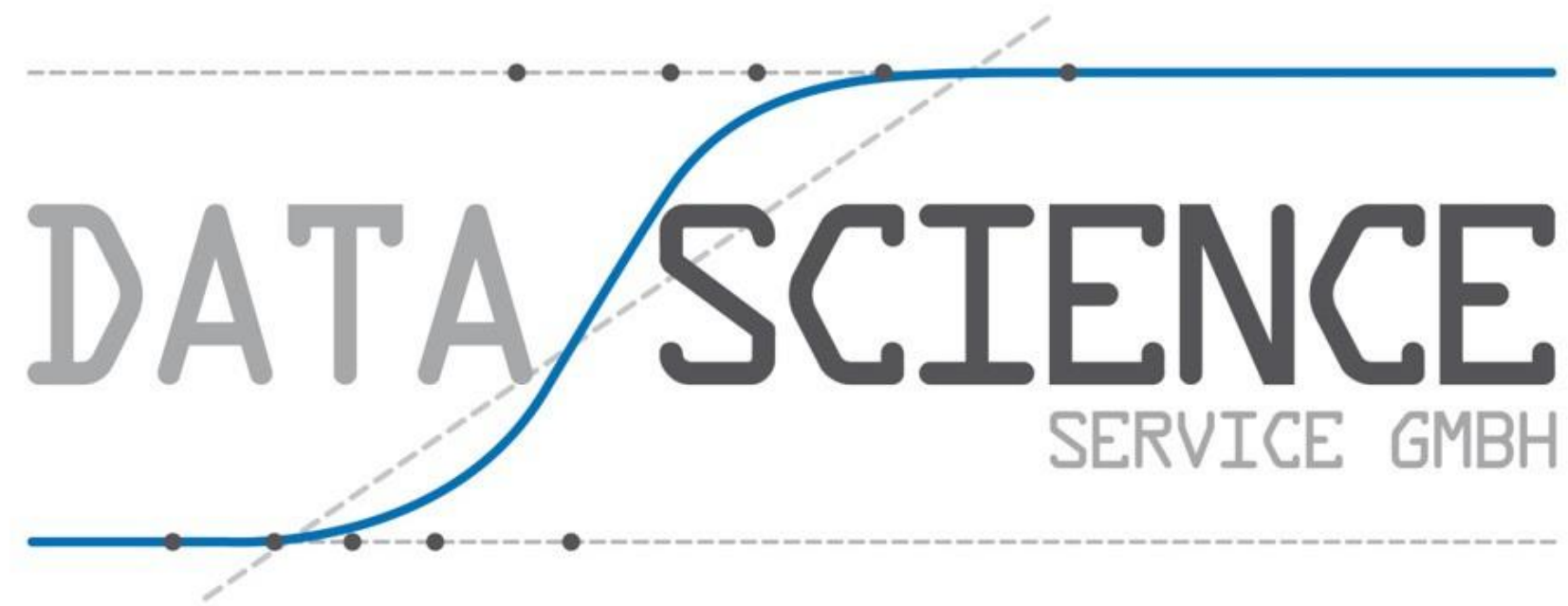
Framework for machine learning applications “one stop shop”



Framework for machine learning applications “one stop shop”

- REST- API
- Microservices
- DB Cached
- Python Module (PIP INSTALLER)
- TRAINING FINALIZED

```
from dsshub.core import Service
dss = Service('user_token')
dss.set_img_paths(['path_to_img_1', 'path_to_img_2', ..., 'path_to_img_n'])
response = dss.predict('service')
```

**WE LOVE FORGING
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LET'S STAY IN TOUCH

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-  wb@ds-s.at
-  Neubaugasse 56, Top 9, 1070
Wien, Österreich

