



# AutoGluon

Gakubu

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# Plan prezentacji

1. Możliwości pakietu
2. Opis każdej kategorii  
+ notebook z kodem
3. Podsumowanie



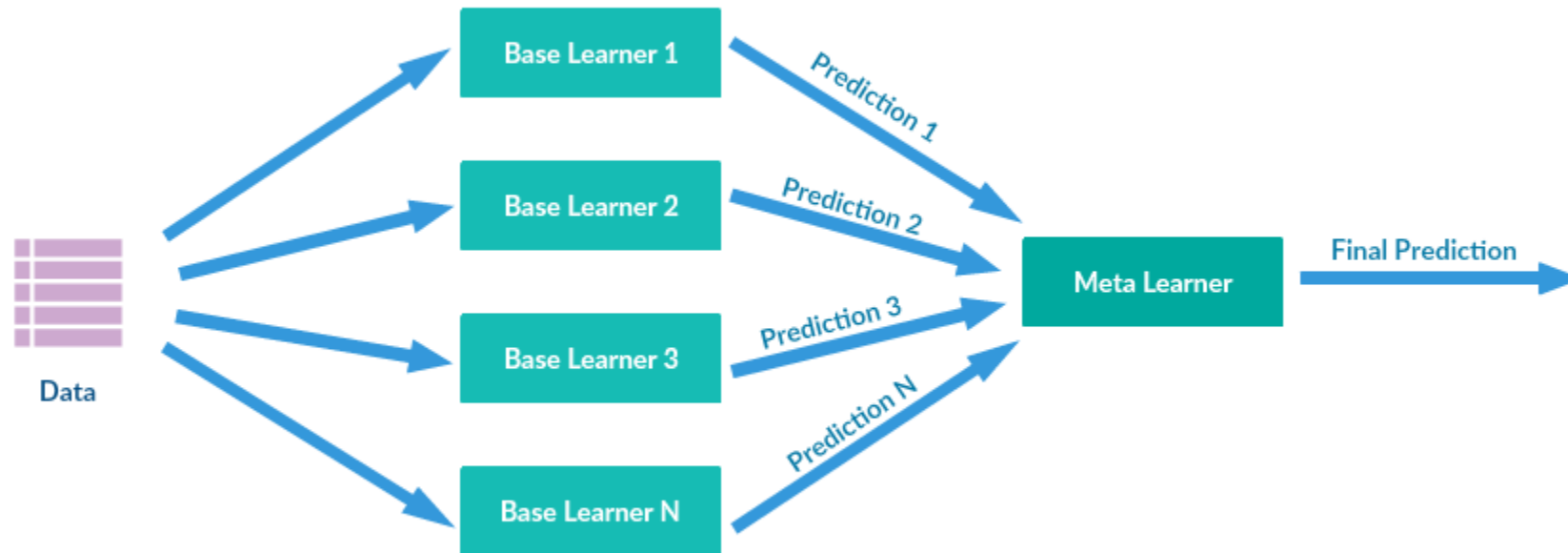
# Możliwości pakietu

1. Tabular Prediction
2. Image Prediction & Object Detection
3. Text Prediction
4. Multimodal Data Tables (Tabular, Text, Image)

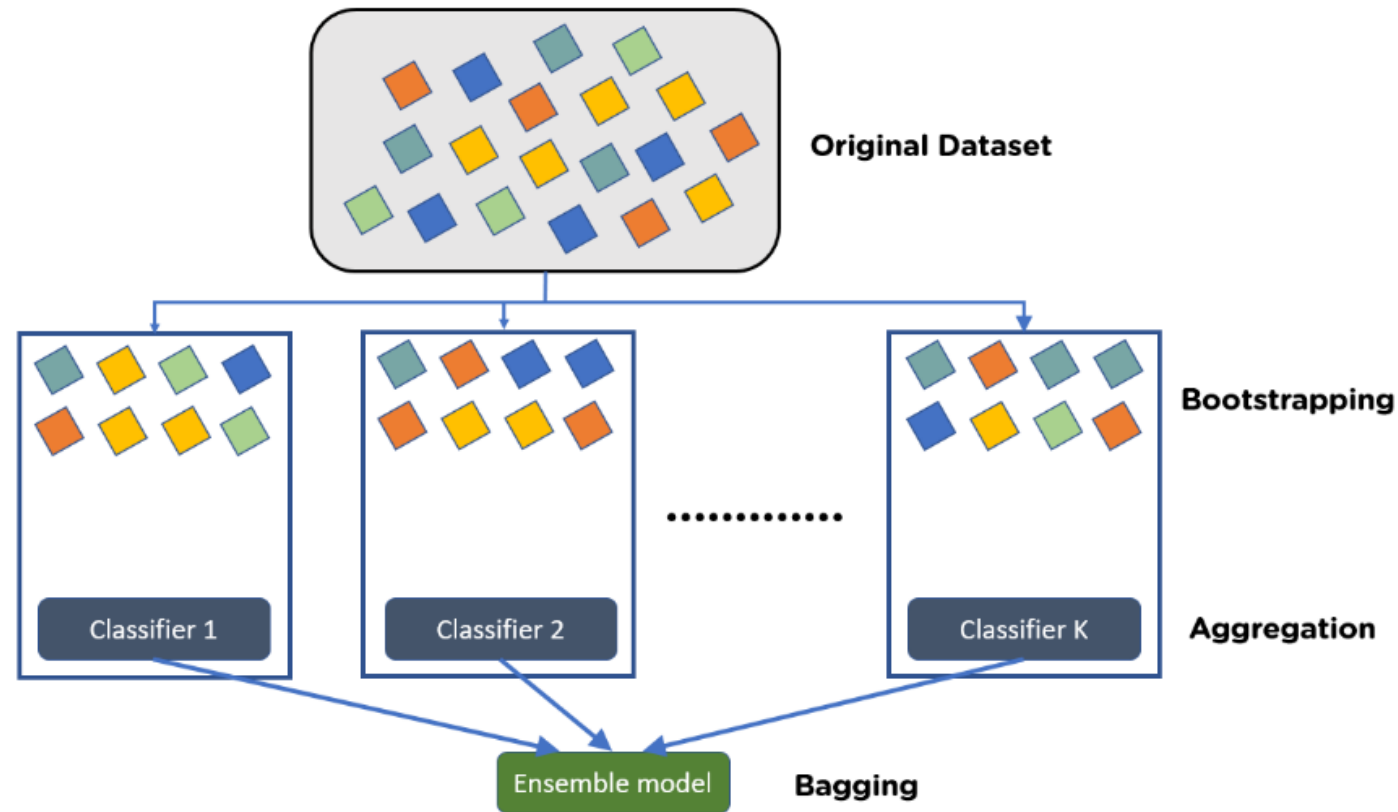
# Tabular prediction



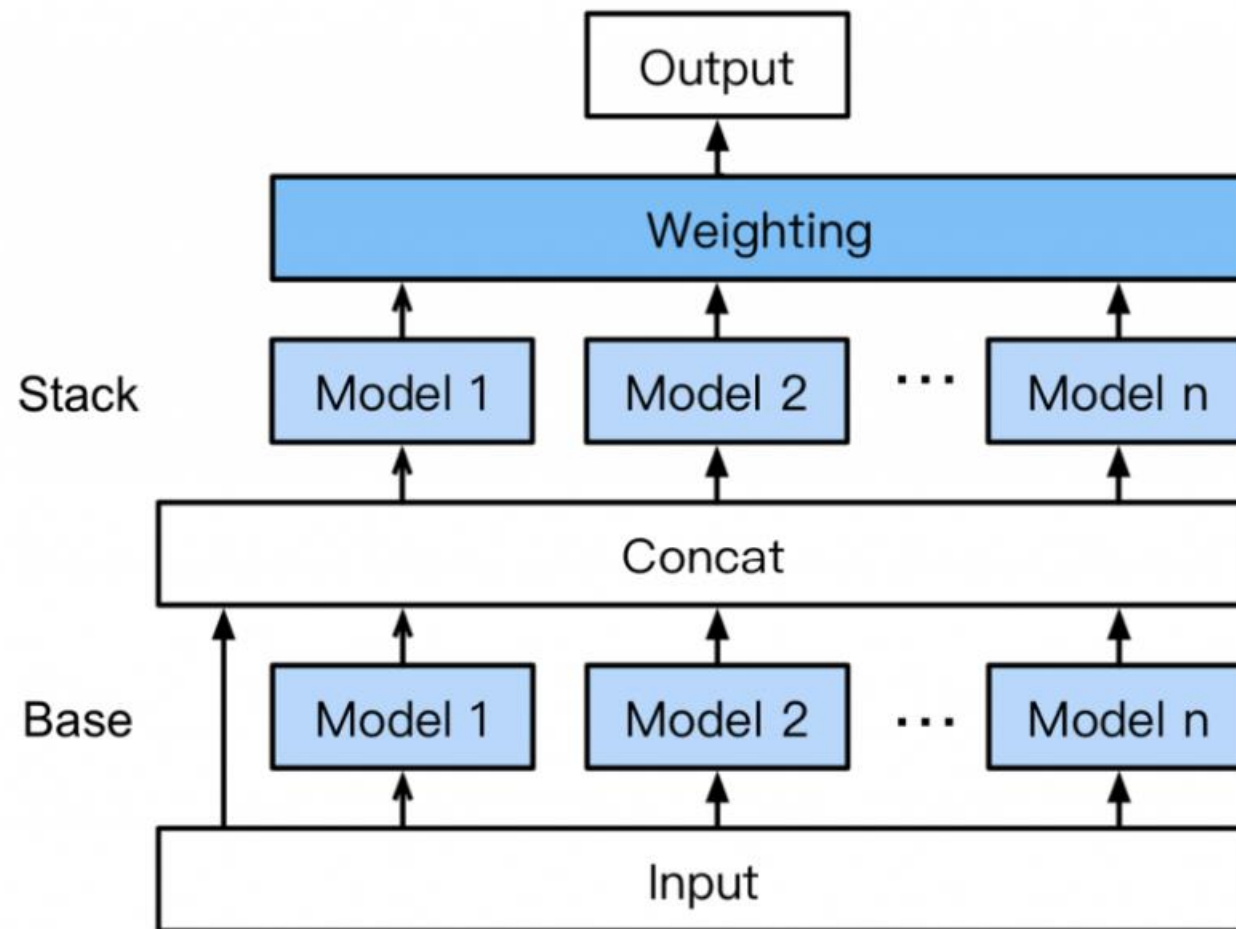
# Stacking



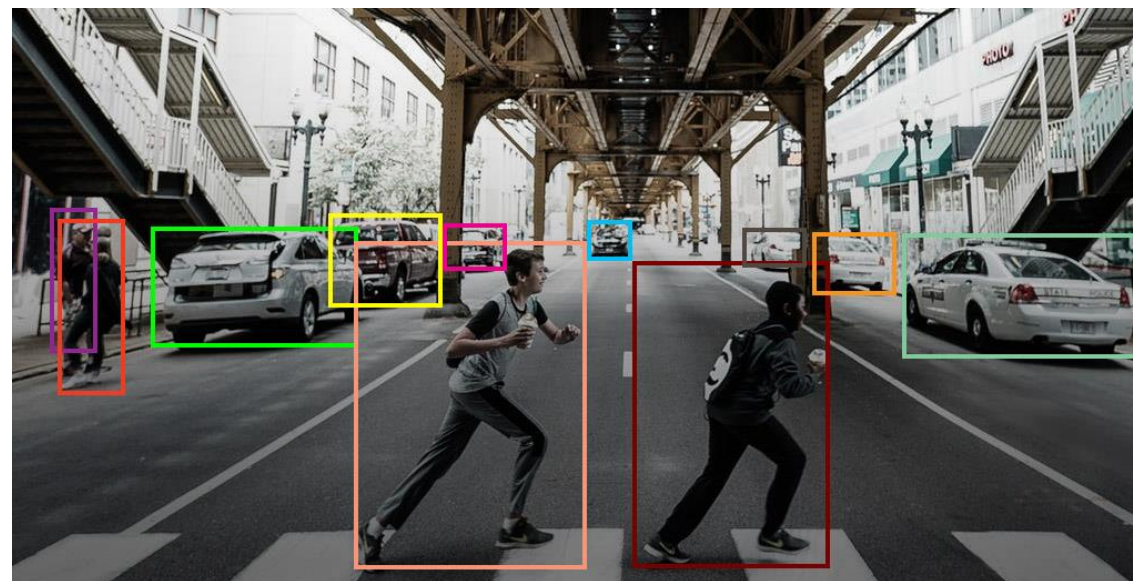
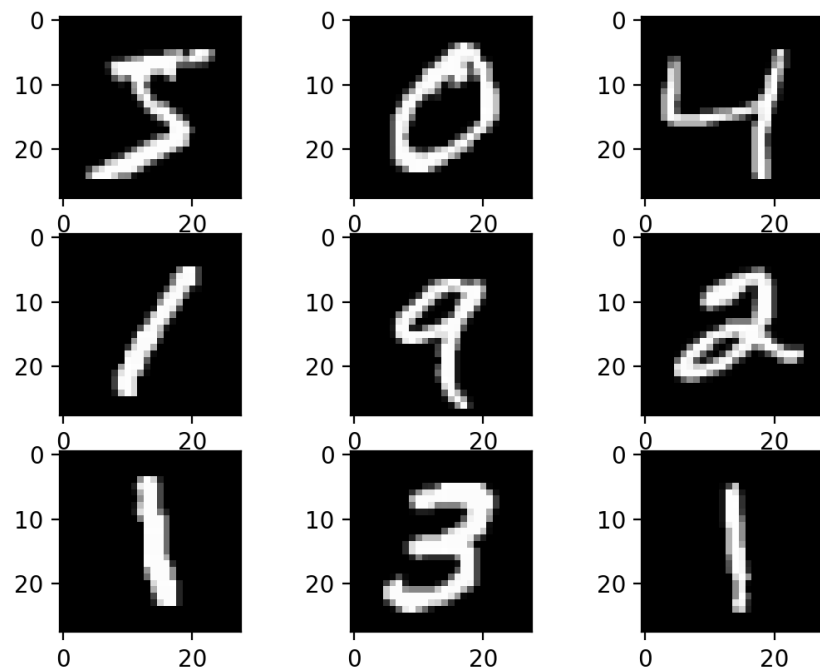
# Bagging



# Autostacking



# Image prediction and Object Detection





# Text prediction

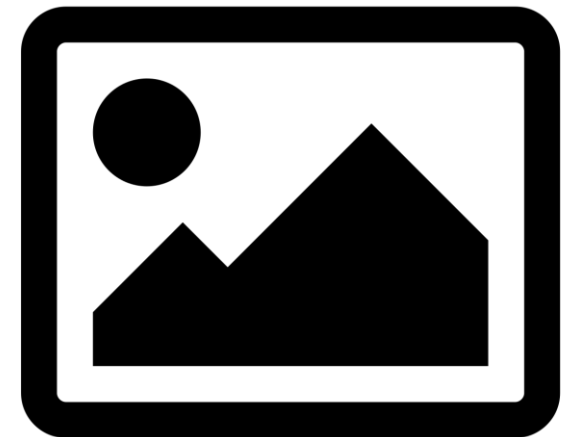
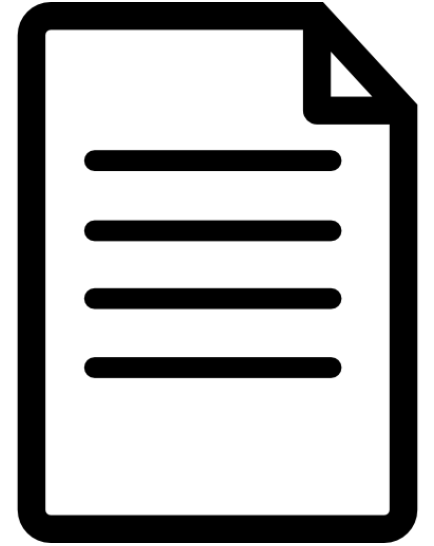


`"string"`

# Multimodal Data Tables

Authors	Signal	Emotion Labeling	Testing method	Affective states	User dependency	Accuracy	Approximate duration	Number of subjects	Extracted physiological features	Graphical representation
Karjo et al. (2018)	PPG EDA ST 3D Acc Air pressure Light GPS Noise	Self-report Smartphone SAM Constant evaluation	Leave-one-out	Valence	UID	86%	45 min	40	PPG: HRV, HRV, Rmssd, PNN30-50, SDNN, HRV triangular index, spectral power, LF, HF, LF/HF	
Eder et al. (2016)	Location Current app Microphone Messages Calls Light Connectivity Calendar Activity ECG	Self-report Smartphone Emotions % 1 EMA / h & 1 / specific event & Voluntary	Leave-one-out	Valence	UD	Avg: 68% Max: 91%	4 weeks Walking times	6	ECG: HRV, Hf, Lf, Lf/Hf, Pnn50, Rmssd, SD1, SD2, SD1/SD2, SDNN, SDSD	
McDuff et al. (2012)	Video Posture Microphone EDA 3D Acc GPS File activity Calendar	Self-report 2D map EMA	Leave-one-out	Arousal Valence Engagement	UID	68%	2 days 10h /d	5	EDA: slope, different between first value and max, position of max, difference between value and min, position of min, zero crossings, peaks	

# Multimodal data tables: Tabular, Text, and Image



# Podsumowanie



- Tabular prediction
- Image prediction
- Object Detection
- Text Prediction
- Multimodal data table prediction
- Optymalizacje hiperparametrów

# Dziękujemy za uwagę

## Bibliografia

<https://auto.gluon.ai/stable/index.html#>