

NEURAL-SYMBOLIC SYSTEMS

an academic AI research community



Deep Learning

$$\begin{aligned}(p \wedge (p \rightarrow q)) &\rightarrow q \\ (\neg q \wedge (p \rightarrow q)) &\rightarrow \neg p \\ (p \rightarrow q) &\rightarrow (\neg p \vee q) \\ ((p \vee q) \wedge \neg p) &\rightarrow q\end{aligned}$$

Logic

*Lorem ipsum
dolor sit amet,
consectetur
adipiscing elit,
sed do ...*

NLP



Knowledge Graphs

$$(BK, E^+, E^-) \stackrel{\text{induces}}{\longrightarrow} H$$

where

$$(BK, H) \models E^+$$

ILP



Semantic Web